

May 24, 2006

Peter Van Alyea
Redwood Oil Company
50 Professional Center Drive, Suite 100
Rohnert Park, CA 94928

Remediation System Operation Report
First Quarter 2006
Redwood Oil Company Bulk Plant
455 Yolanda Avenue
Santa Rosa, CA

Dear Mr. Van Alyea:

ECM Group (ECM) has prepared this report summarizing the operation of the groundwater remediation system at the above-referenced site (Figures 1 and 2, Appendix A) for the period of December 23, 2005 through March 31, 2006. The remediation system currently consists of a Ground Water Extraction (GWE) system. A plan view of the system is shown on Figure 3 (Appendix A). A Soil Vapor Extraction (SVE) system and an Air Sparge (AS) system were formerly operated at the facility. Operation of the SVE system was discontinued in September of 2003. Operation of the AS system was discontinued in April of 2005.

SYSTEM OPERATION

A summary report describing system installation was submitted in November 2001.¹ The GWE system was activated in June, 2001. The AS system was activated in July, 2001. The SVE system was initially activated on July 27, 2001. On August 22, 2001, the SVE system was deactivated in order to clean the furnace catalyst and bring the system to Bay Area Air Quality Management (BAAQMD) standards. Modifications were completed and the system was reactivated on September 18, 2001.

A System Evaluation Report dated August 27, 2003 recommended deactivation of the SVE system.² The SVE system was deactivated September 5, 2003. Historical operating data for the SVE system is presented in Tables 1 and 2, Appendix B.

¹ ECM, 2001, Remedial System Installation, Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, CA, November 12, 2001, 5 pages and 4 appendices.

² 2003, ECM, Remedial System Evaluation and Monitoring Reduction Proposal, 455 Yolanda Ave., Santa Rosa, CA August 27, 2003, 10 pages and 3 attachments.

The remediation system infrastructure includes nine wells which are constructed as combined GWE/SVE wells (GWE/SVE-1 through GWE/SVE-9), seven GWE wells (PMCS-1 through PMCS-6, and GWE-10), three SVE wells (SVE-11 through SVE-13), and 14 air injection (sparge) points. Schematics of GWE wells are shown in Figures 4 and 5 (Appendix A). Schematics of SVE wells are shown in Figures 6 and 7 (Appendix A). Schematics for combined GWE/SVE well-heads are shown in Figure 8 (Appendix A). Schematics of an AS injection point is shown in Figure 9 (Appendix A). Typical conduit trench details are shown in Figure 10 (Appendix A). Layout of the water, air, and electrical systems in the treatment system pad are shown in Figures 11 through 13 (Appendix A).

GWE System Operation

The GWE system is currently focused on wells PC-1 through PC-6, GWE-3, GWE-7, and GWE-8 (Figure 3, Appendix A). Pumps are currently not activated in wells GWE-1, GWE-2, GWE-4, GWE-5, GWE-6, GWE-9, and GWE-10.

Table 3 (Appendix B) provides flow totalizer readings for the GWE system. Between system start-up and March 31, 2006, a total of 5,109,960 gallons of ground water were extracted by the system. Flow rate for the system over the first quarter of 2006 varied from 0.0 to 6.8 gallons per minute (GPM).

System extraction wells are approximately 30 ft in depth and contain pumps that are 5 ft in length. Pumps are set approximately 0.5 ft from the bottom of each well. A water level of approximately 24 to 30 ft bgs in an extraction well is an indicator of optimum performance. Historical depths to water in extraction wells are provided in Table 5 (Appendix B).

Analytic laboratory reports for system influent water samples collected during the first quarter of 2006 are included in Appendix C. Operation and maintenance field notes are included in Appendix D.

Air Sparge System Operation

The air sparge system consisted of 14 air injection points (Figure 3, Appendix A). Table 6 (Appendix B) presents air flow readings for each sparge point since system start-up, which were recorded quarterly. Air was delivered to the injection points at approximately 20 psi.

The AS system was designed to operate in conjunction with the SVE system. Operating the AS system at its previous flow rate (2 to 10 scfm) without the SVE system in operation to remove volatilized hydrocarbons is not advised. After deactivation of the SVE system, the AS system was converted to a low-flow system, with a flow rate of less than 1 scfm for each injection point. The purpose of the low flow system was to continue to introduce oxygen into the subsurface,

encouraging bioremediation.

On April 24, 2005 the air sparge portion of the remediation system was deactivated for an efficiency evaluation. The air sparge system remained off during the first quarter of 2006. Details of operational hours and sparge point data are provided in Table 6 (Appendix A).

SYSTEM PERFORMANCE EVALUATION

GWE System Performance Evaluation

The GWE system operated during the first quarter of 2006 with down time for routine maintenance. The GWE system was deactivated on March 1 to address possible carbon filter fouling. The system was reactivated on March 16. During the first quarter of 2006 (December 23, 2005 through March 31, 2006), a total of 376,574 gallons of ground water were extracted by the system (Table 3, Appendix A), at a flow rate of between 0.0 and 3.18 GPM.

Hydrocarbon removal is calculated using the ground water influent hydrocarbon concentrations in Table 4 (Appendix B) and the figures for gallons discharged in Table 3 (Appendix A). Assuming the influent stream sample collected on January 11, 2006 was typical for the quarter as a whole (i.e., assuming an average concentration of 370 parts per billion (ppb) for gasoline, 570 ppb for diesel, and 300 ppb for MTBE), then mass of contaminants removed by the GWE system during the first quarter of 2006 was approximately 1.34 kg of gasoline and diesel and 0.43 kg of MTBE. Quarterly hydrocarbon and MTBE removal rates are shown in Table 8 and Graph 1 (Appendix B).

Another measure of system performance is the system's ability to control the offsite migration of impacted ground water. Water level measurements are collected in pumping wells and monitoring wells on a semi-annual basis. Water level measurements in pumping wells and monitoring wells are used to evaluate GWE system performance in terms of drawdown and plume migration control. Depths to water in GWE wells were measured on January 27, 2006 to evaluate system performance. Measurements are provided in Table 5 (Appendix B). Figure 2 (Appendix A) shows inferred ground water elevation contours based on the measurements recorded on January 27, 2006 in the extraction wells and February 1, 2006 in the monitoring wells (Table 7, Appendix B).

Extraction wellhead elevations are estimated based on surveyed monitoring well elevations. Extraction wells will be surveyed during 2006. After the wells are surveyed, depths to water will be measured concurrently in monitoring wells and extraction wells.

Thank you for the opportunity to provide environmental consulting services to Redwood Oil Company. Please call if you have questions or require additional information.

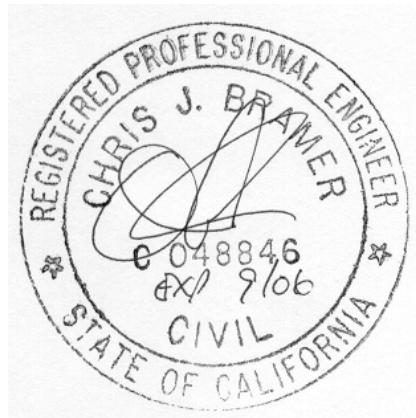
Sincerely,
ECM Group



David Hazard
Staff Scientist



Chris Bramer
Professional Engineer #C048846



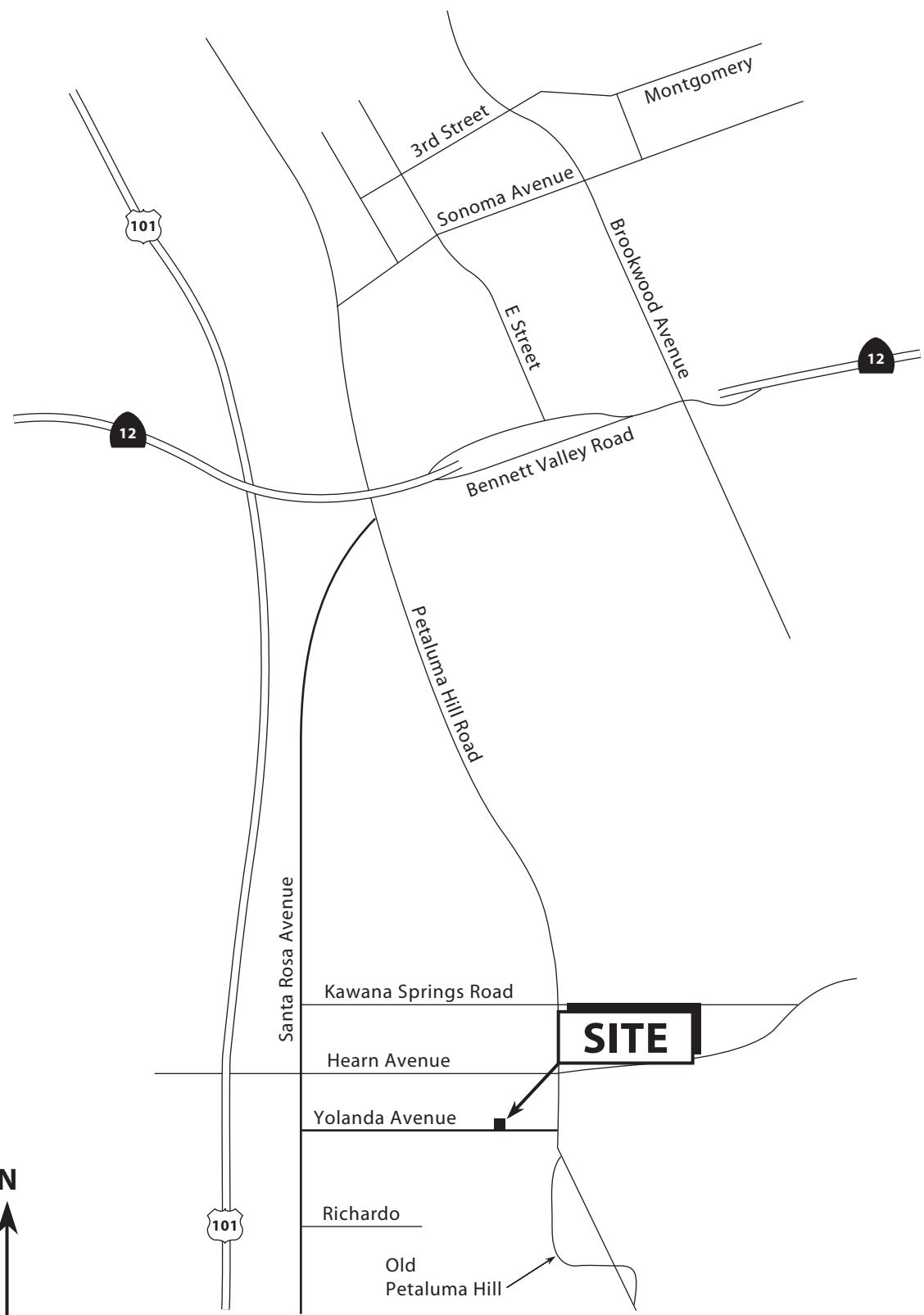
Attachments:

- Appendix A - Figures
- Appendix B - Tables
- Appendix C - Laboratory Analytical Reports and Chain of Custody Record
- Appendix D - Field Notes

cc: Joan Fleck, NCRWQCB

APPENDIX A

FIGURES



Base map reference: Thomas Bros.

Figure 1. Site Location Map - Redwood Oil Service Station, 455 Yolanda Avenue, Santa Rosa, California

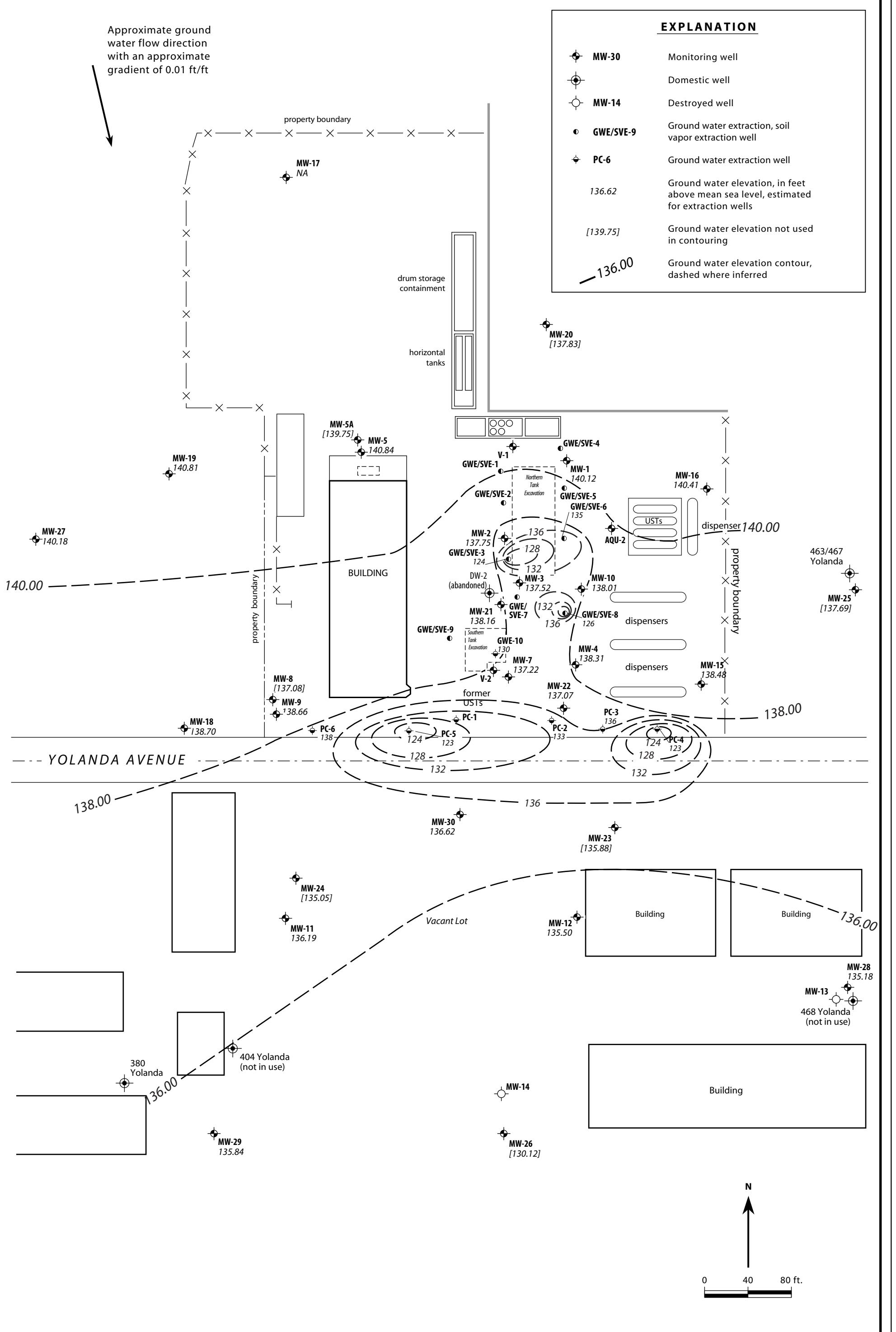


Figure 2. Monitoring Well Locations and Ground Water Elevation Contour Map - February 1, 2006 - Redwood Oil Bulk Plant, 455 Yolanda Avenue, Santa Rosa, California

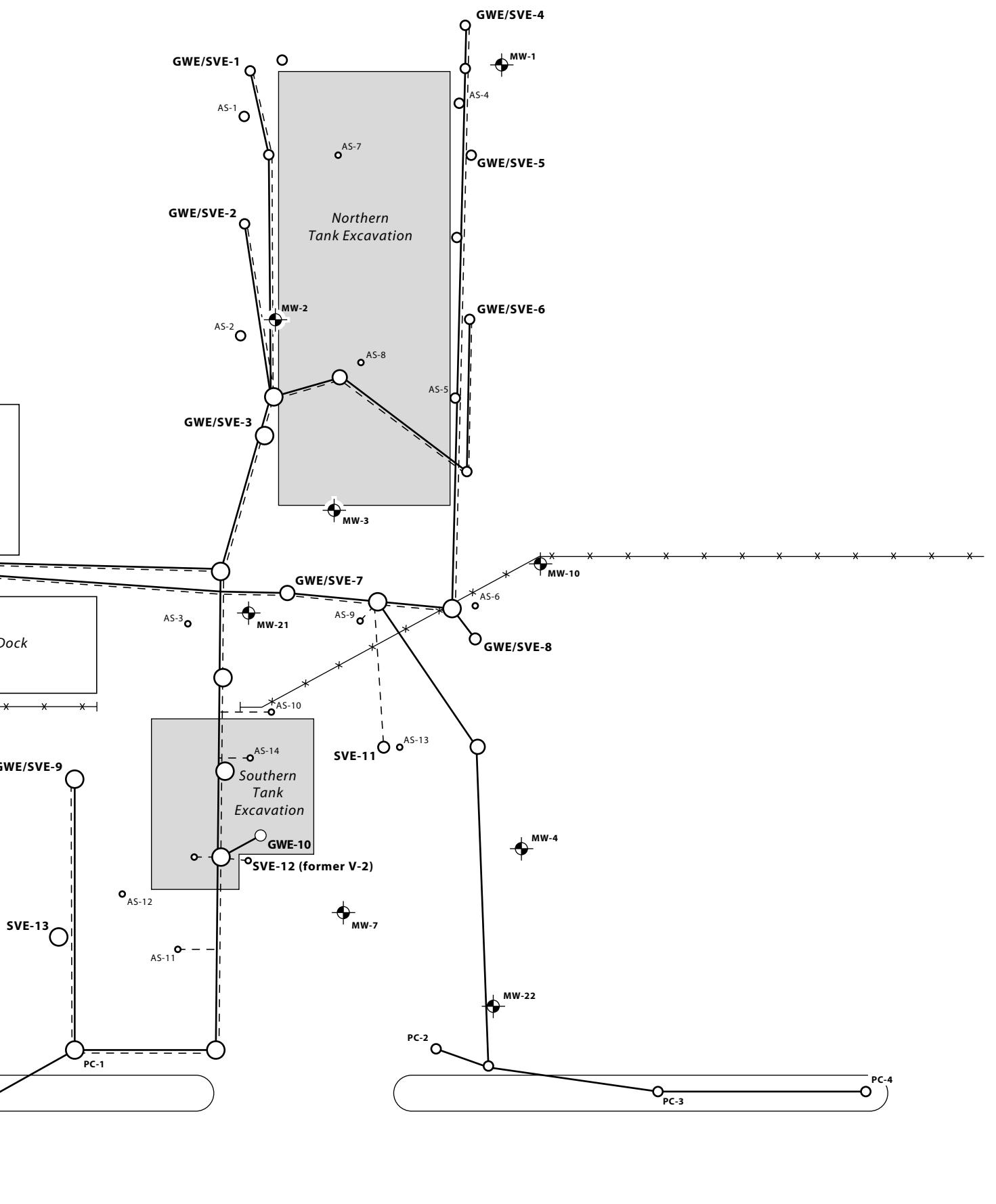
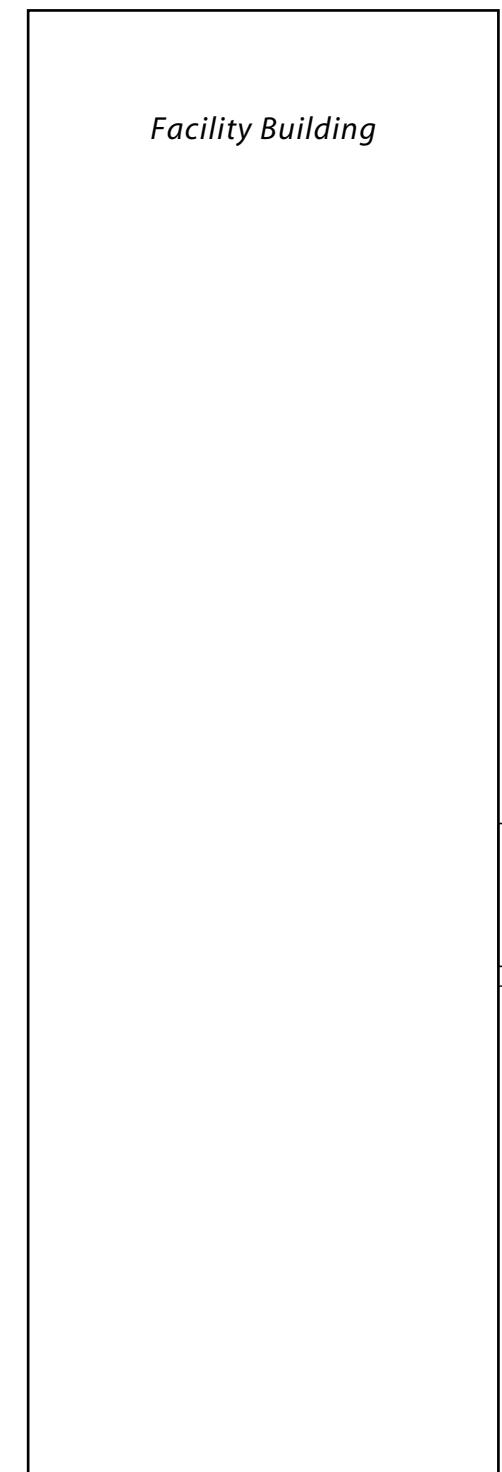
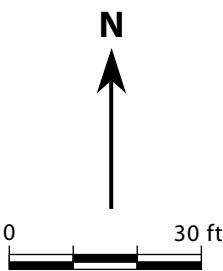
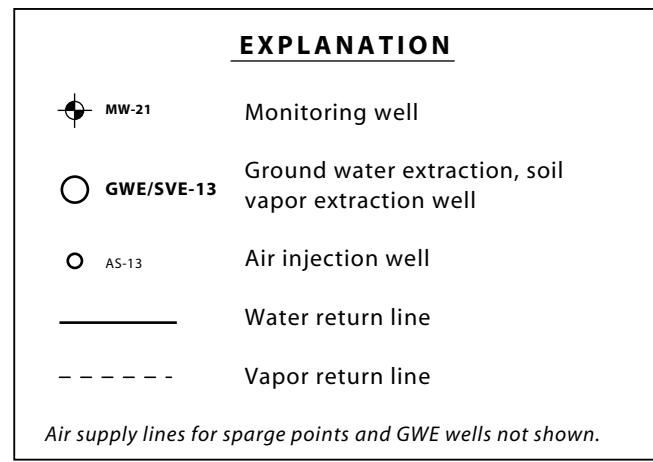


Figure 3. Remediation System - Plan View - 455 Yolanda Avenue, Santa Rosa, California

Ground Water Extraction Well

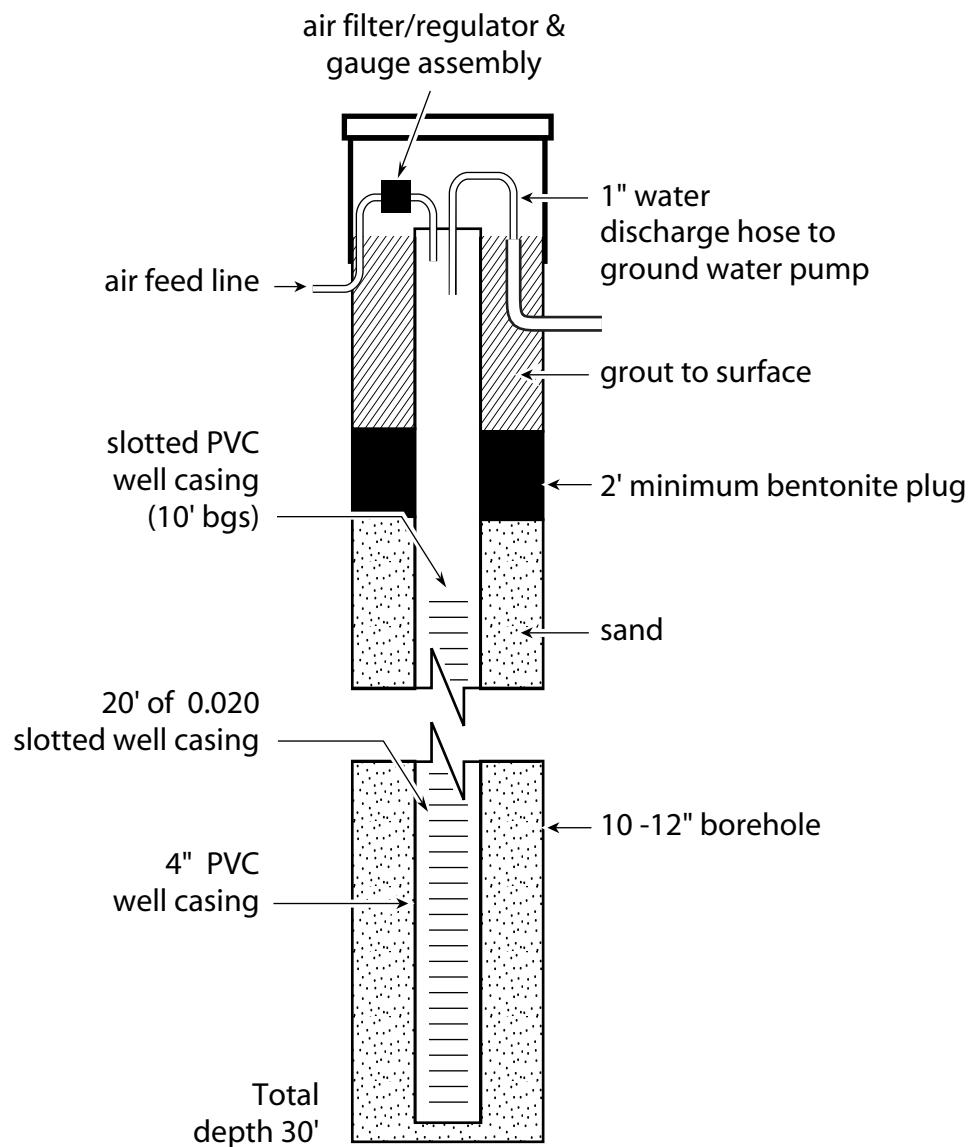


Figure 4.□ Groundwater Extraction Well Diagram - Redwood Oil Bulk Plant - 455 Yolanda, Santa Rosa, California

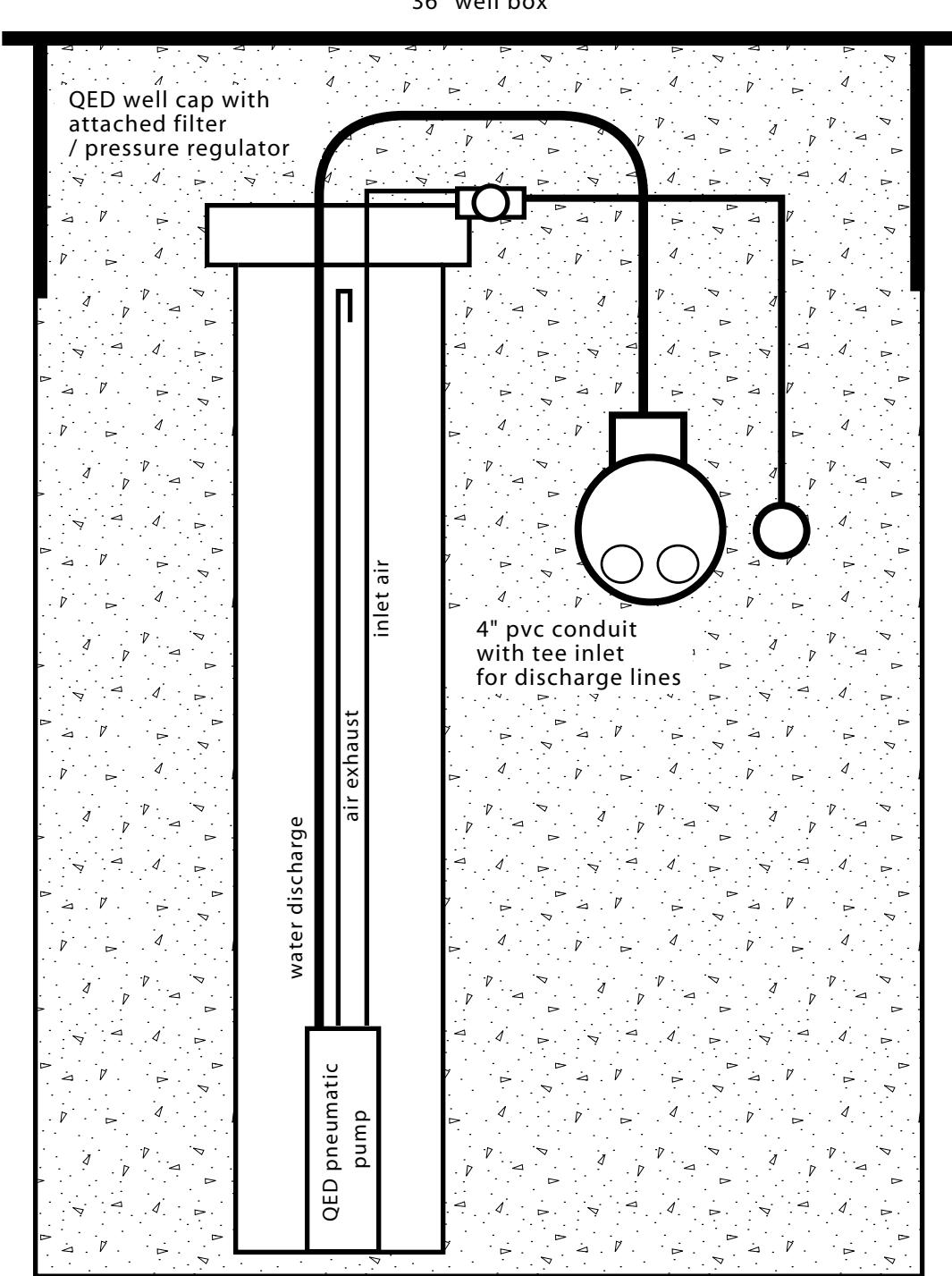


Figure 5.□ Groundwater Extraction Well Head Detail - Redwood Oil Bulk Plant - 455 Yolanda, Santa Rosa, California

Soil Vapor Extraction Well

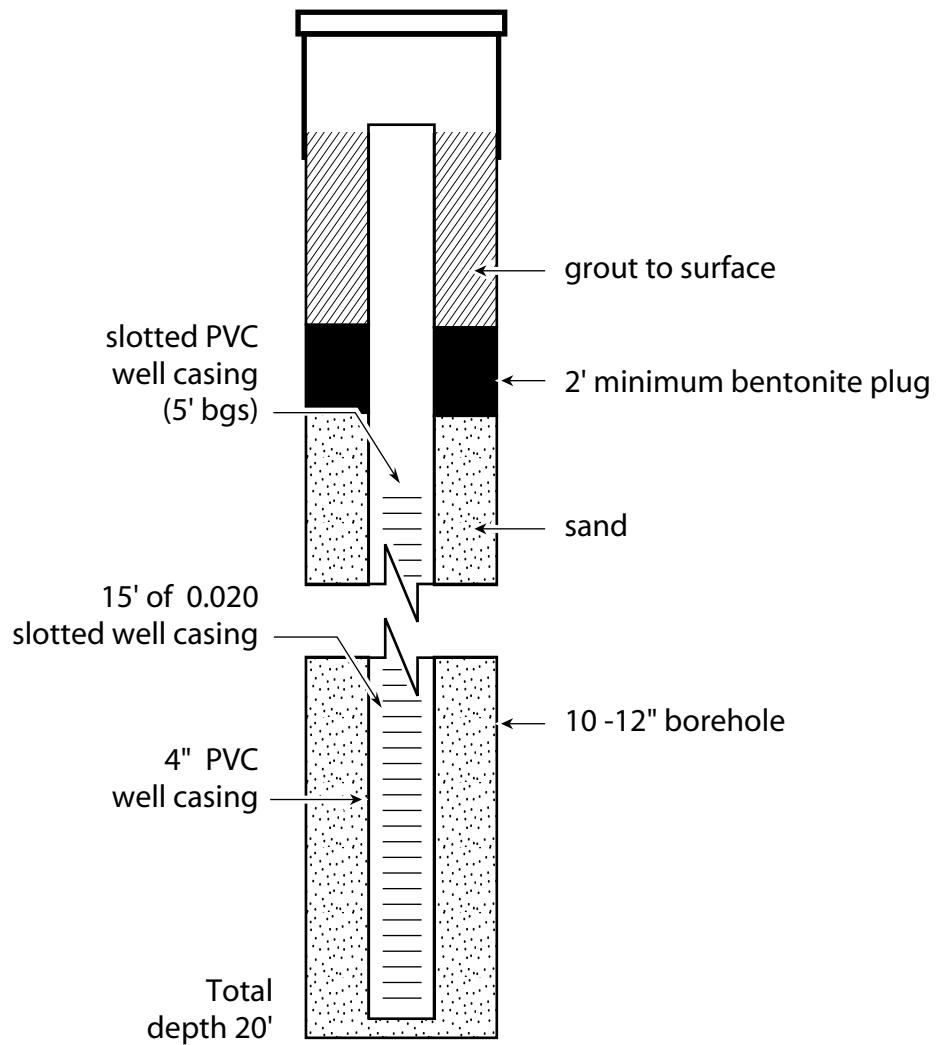


Figure 6. □Soil Vapor Extraction Well Diagram - Redwood Oil Bulk Plant - 455 Yolanda, Santa Rosa, California

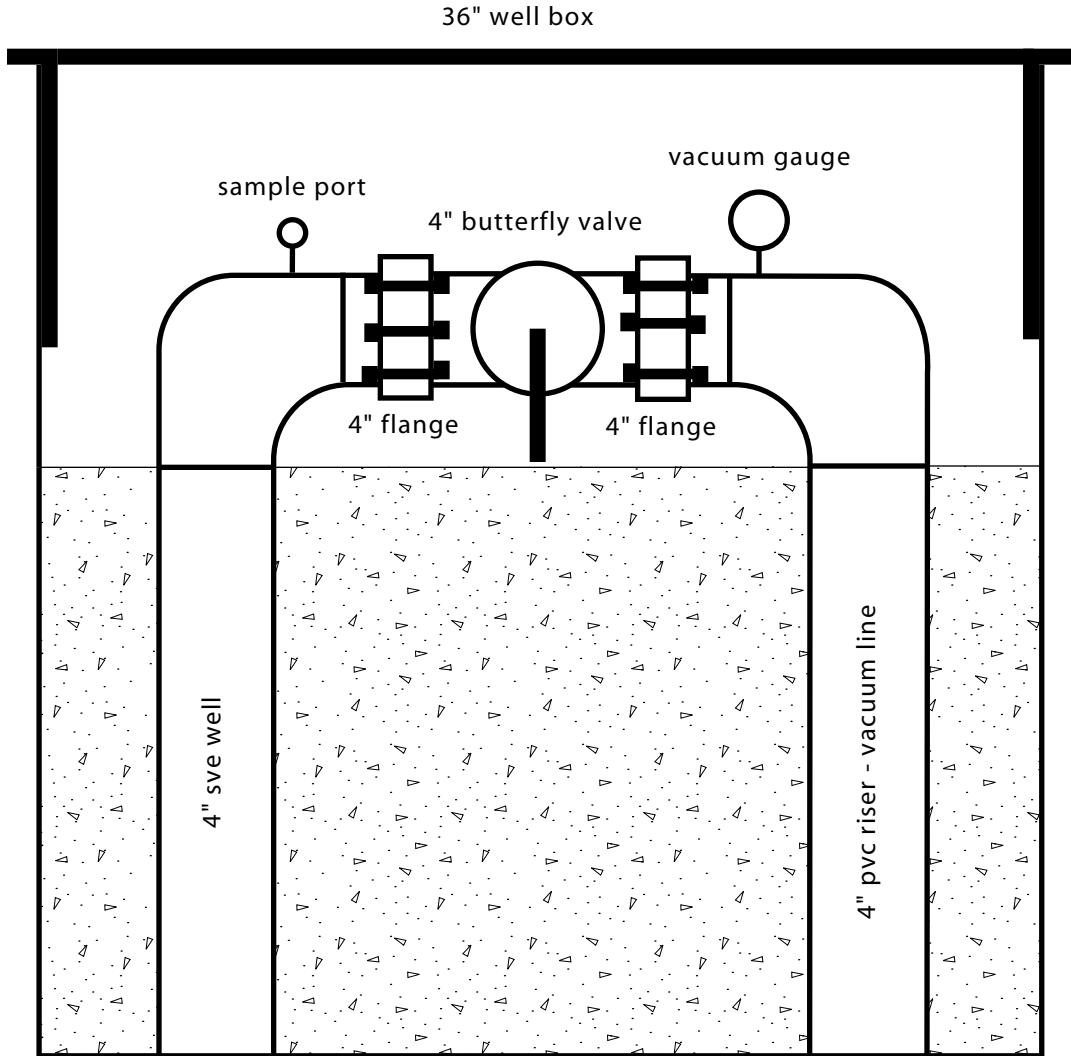


Figure 7. □Soil Vapor Extraction Well Head Detail - Redwood Oil Bulk Plant - 455 Yolanda, Santa Rosa, California

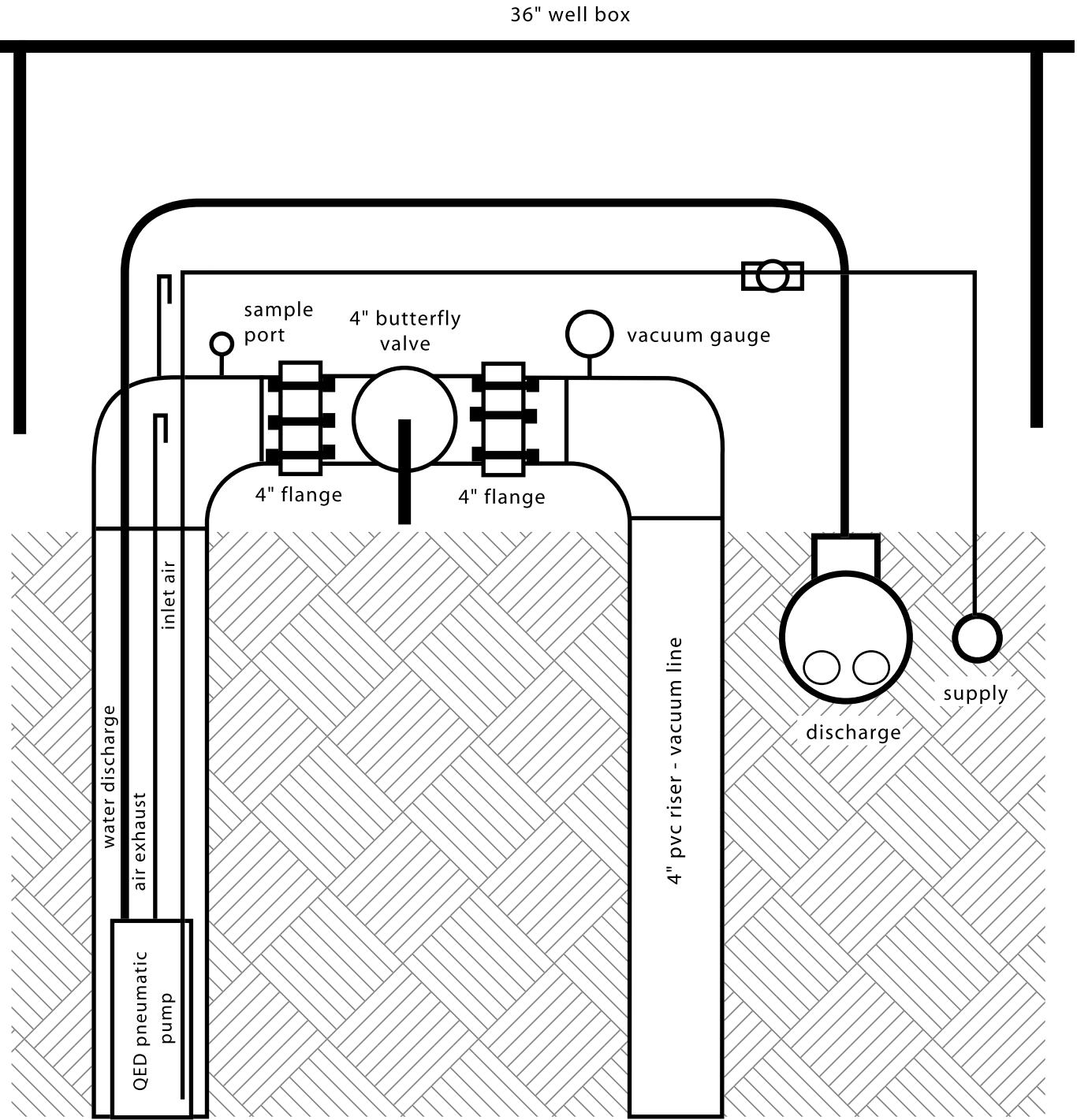


Figure 8. Combined Ground Water and Soil Vapor Extraction Well Head Detail - Redwood Oil Bulk Plant -
455 Yolanda, Santa Rosa, California

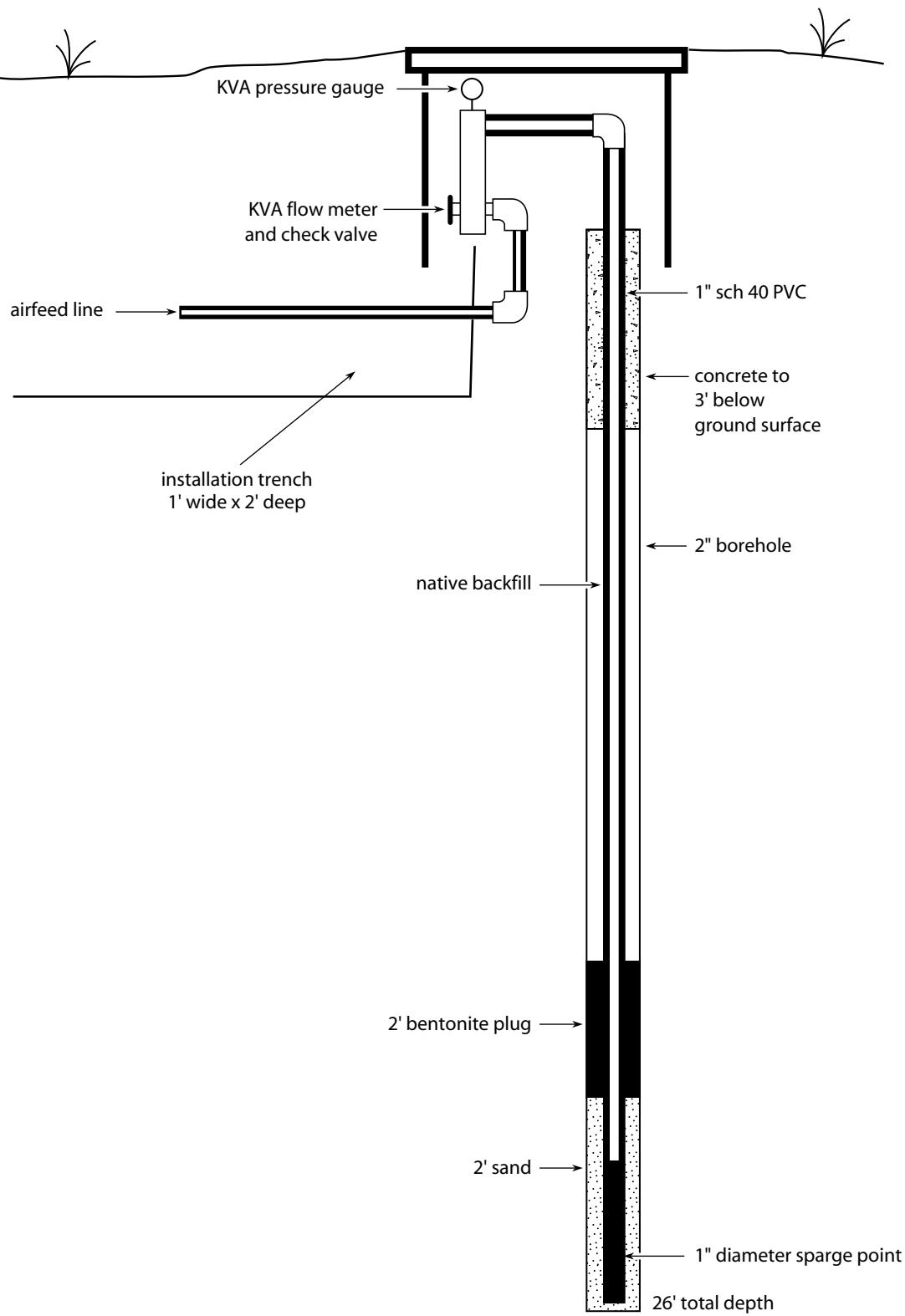
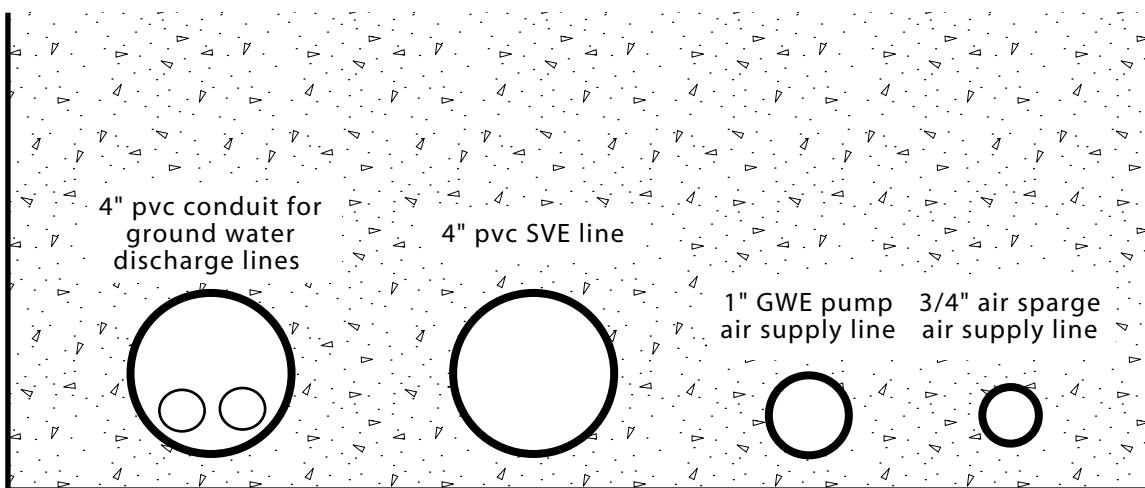
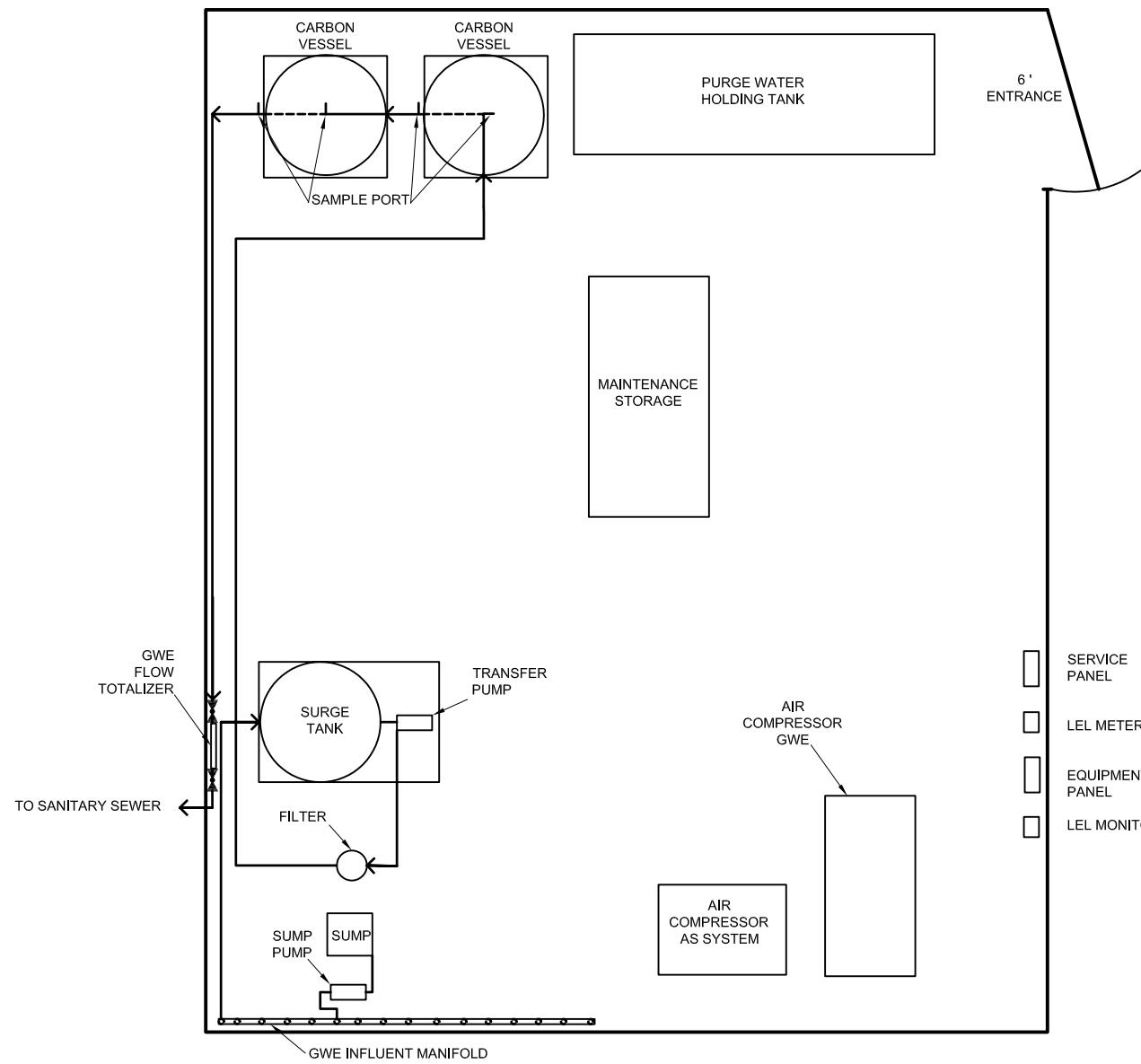


Figure 9.□Air Injection Well Diagram - Redwood Oil Bulk Plant - 455 Yolanda, Santa Rosa, California



Trench Dimensions
2' wide x 3' deep
(nominal)

Figure 10. Pipe Trench Detail - Redwood Oil Bulk Plant - 455 Yolanda, Santa Rosa, California



PROJECT
REMEDIATION SYSTEM
Redwood Oil Bulk Plant,
455 Yolanda Avenue, Santa Rosa California

DRAWING
WATER SYSTEM

PROJECT NUMBER 98-507-95

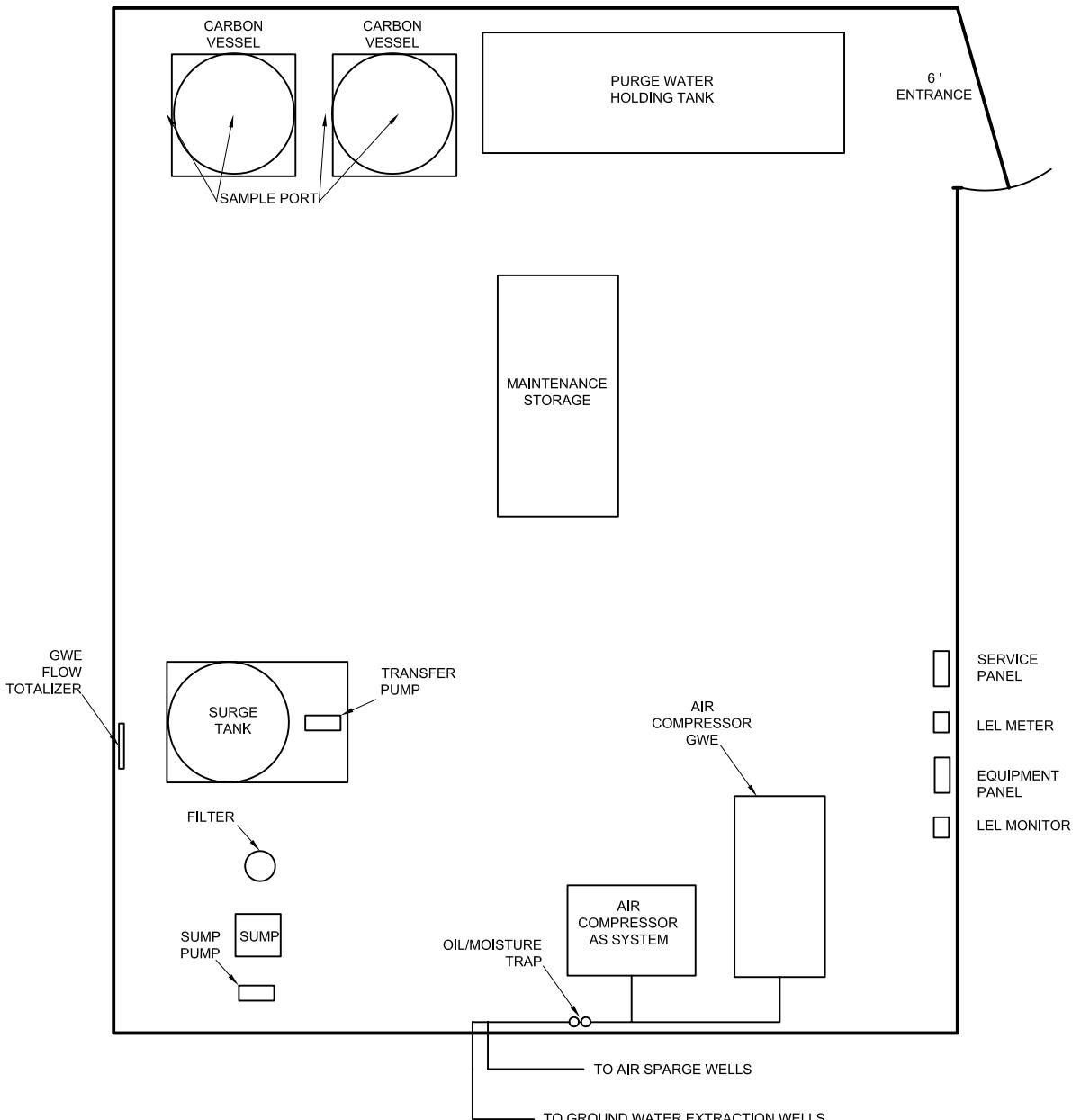
DRAWN BY RG

ORIGINAL DATE

CHECKED BY CB

REVISION DATE 2/24/05

FIGURE NUMBER 11



PROJECT
REMEDIATION SYSTEM
Redwood Oil Bulk Plant,
455 Yolanda Avenue, Santa Rosa California

DRAWING
AIR SYSTEM

PROJECT NUMBER **98-507-95**

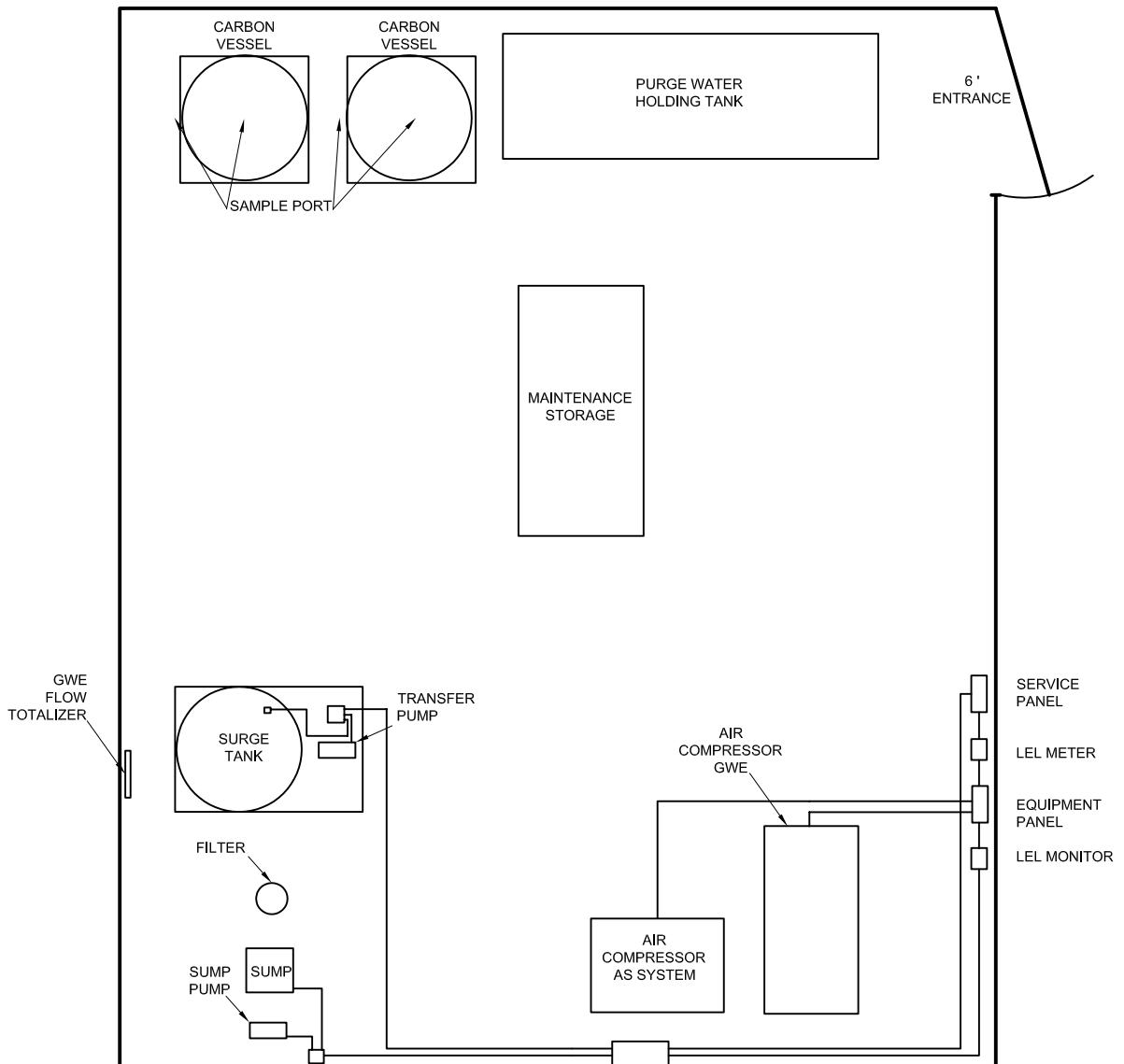
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ORIGINAL DATE

CHECKED BY **CB**

REVISION DATE **2/10/05**

FIGURE NUMBER **12**



| | | | | | | |
|----------------------|---|--|-----------------------|-----------|----------------------|----|
| ECM Group | PROJECT REMEDIATION SYSTEM Redwood Oil Bulk Plant, 455 Yolanda Avenue, Santa Rosa California | DRAWING ELECTRICAL SYSTEM | PROJECT NUMBER | 98-507-95 | DRAWN BY | RG |
| | | | ORIGINAL DATE | | CHECKED BY | CB |
| | | | REVISION DATE | 2/10/05 | FIGURE NUMBER | 13 |

APPENDIX B

TABLES AND GRAPHS

Table 1. Vapor Extraction System Flow Calculations - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Influent Concentration (ppm) | Influent Concentration $\mu\text{g/l}^2$ | Removal Rate Kg/day ³ |
|-----------------------|------------------------------|--|----------------------------------|
| 7/27/01 | 327 | 1,360 | 11.7 |
| 8/1/01 | 214 | 890 | 7.7 |
| 8/2/01 ¹ | 200.23 | 834.2 | 7.2 |
| 8/10/01 | 256 | 1,064 | 9.2 |
| 8/20/01 | 224 | 931 | 8.0 |
| 9/12/01 ¹ | 52.51 | 222.1 | 1.9 |
| 9/25/01 | 102 | 424 | 3.6 |
| 10/5/01 | 118 | 490 | 4.2 |
| 10/16/01 | 242 | 1,006 | 8.7 |
| 11/2/01 | 120 | 499 | 4.3 |
| 11/9/01 | 97 | 403 | 3.5 |
| 12/12/01 ¹ | 162.6 | 681 | 5.8 |
| 3/12/02 ⁴ | 2.6 | 10.8 | 0.1 |
| 3/29/02 ⁵ | 321 | 1,334 | 11.4 |
| 4/5/02 | 5.2 | 21.6 | 0.2 |
| 4/26/02 | 0 | 0 | 0 |
| 5/16/02 | 4.3 | 17.9 | 0.2 |
| 5/24/02 | 6.5 | 27.0 | 0.2 |

Table 1. Vapor Extraction System Flow Calculations - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Influent Concentration (ppm) | Influent Concentration $\mu\text{g/l}^2$ | Removal Rate Kg/day ³ |
|----------------------|------------------------------|--|----------------------------------|
| 5/29/02 | 3.6 | 14.9 | 0.1 |
| 6/7/02 | 4.3 | 17.9 | 0.2 |
| 6/13/02 | 3.2 | 13.3 | 0.1 |
| 6/28/02 | 2.3 | 9.6 | 0.1 |
| 7/2/02 | 3.8 | 15.8 | 0.1 |
| 7/19/02 | 148 | 615.2 | 5.2 |
| 7/25/02 | 4.7 | 19.5 | 0.2 |
| 8/1/02 | 205 | 852.2 | 7.2 |
| 8/8/02 | 2.3 | 9.6 | 0.1 |
| 8/14/02 ¹ | 121 | 504.4 | 4.3 |
| 8/16/02 | 4.7 | 19.5 | 0.2 |
| 9/9/02 ⁶ | 29.9 | 124.3 | 1.1 |
| 9/10/02 | 4.3 | 17.9 | 0.2 |
| 9/16/02 ⁷ | 58.6 / 9.9 | 243.6 / 41.2 | 2.1 / 0.35 |
| 9/27/02 ⁷ | 10 / 2.9 | 41.6 / 12.0 | 0.36 / 0.1 |
| 10/2/02 | 1.8 | 7.5 | 0.1 |
| 10/11/02 | 2.3 | 9.6 | 0.1 |
| 10/18/02 | 2.2 | 9.1 | 0.1 |

Table 1. Vapor Extraction System Flow Calculations - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Influent Concentration (ppm) | Influent Concentration $\mu\text{g/l}^2$ | Removal Rate Kg/day ³ |
|-----------------------|------------------------------|--|----------------------------------|
| 10/20/02 | 2.0 | 8.3 | 0.1 |
| 11/11/02 | 2.4 | 10.0 | 0.1 |
| 11/22/02 ¹ | 4.4 | 18.3 | 0.2 |
| 11/27/02 ¹ | 1.8 | 7.5 | 0.1 |
| 12/4/02 ¹ | 1.2 | 5.0 | <0.1 |
| 12/13/02 | 1.4 | 5.8 | <0.1 |
| 12/20/02 | 0.6 | 2.5 | <0.1 |
| 12/27/02 | 1.2 | 5.0 | <0.1 |
| 1/3/03 | 1.9 | 7.9 | 0.1 |
| 1/10/03 | 1.6 | 6.7 | 0.1 |
| 1/16/03 | 0.6 | 2.5 | <0.1 |
| 1/29/03 | 0.6 | 2.5 | <0.1 |
| 2/7/03 | 0.9 | 3.7 | <0.1 |
| 2/11/03 ⁸ | 2.5 | 10.4 | 0.1 |
| 2/14/03 ⁸ | 12.2 | 51 | 0.4 |
| 2/28/03 ⁸ | 1.6 | 6.7 | <0.1 |
| 3/4/03 ⁸ | 10 | 42 | 0.4 |
| 3/11/03 ⁸ | 1.2 | 5 | <0.1 |
| 3/28/03 | 2.5 | 10.4 | 0.1 |

Table 1. Vapor Extraction System Flow Calculations - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Influent Concentration (ppm) | Influent Concentration $\mu\text{g/l}^2$ | Removal Rate Kg/day ³ |
|---------|------------------------------|--|----------------------------------|
| 6/6/03 | 0 | 0 | <0.1 |
| 6/18/03 | 1 | 4 | <0.1 |
| 6/27/03 | 0 | 0 | <0.1 |
| 7/3/03 | 0 | 0 | <0.1 |
| 7/11/03 | 0 | 0 | <0.1 |
| 7/17/03 | 0 | 0 | <0.1 |
| 7/25/03 | 0 | 0 | <0.1 |
| 7/31/03 | 0 | 0 | <0.1 |
| 8/8/03 | 0 | 0 | <0.1 |
| 8/14/03 | 0 | 0 | <0.1 |
| 8/19/03 | 0 | 0 | <0.1 |

Explanation:

ppmv = parts per million (volume)

$\mu\text{g/l}$ = micrograms/liter

kg/day = kilograms/day

Table 1. Vapor Extraction System Flow Calculations - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

NOTES:

¹ ppm and ug/l reported from samples submitted to Air Toxics, Ltd, Folsom, CA.

²μg/l values calculated using the following equation: μg/l = ppmv x molecular weight/24.055. Assumed molecular weight of gasoline = 100. Equation provided by Air Toxics Analytical Laboratory

³ kg/day calculations are based on system flow of 210 SCFM (standard cubic feet per minute).

⁴ Thermal oxidation unit inoperative from 12/31/01 through 2/21/02 due to mechanical failure.

⁵ Thermal oxidation unit inoperative from 3/15/02 through 3/19/02 due to mechanical failure.

⁶ SVE system inoperative between 8/16/02 and 9/9/02 in order to determine whether temporary shutdown would improve SVE system performance.

⁷ PPMV reading taken with Flame Ionization Detector (first measurement shown) and also with Photo Ionization Detector (second measurement taken).

⁸ System modified; subsequent to 2/11/03, only SVE wells 3, 5, and 7 operative.

Table 2. Flow Measurements and Vapor Concentration in Vapor Extraction Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Well I.D. # | Date | Flow Velocity ft/minute | Flow Rate (SCFM)¹ | Vapor Concentration (ppmv) | Vapor Concentration µg/l² | TPH(G) Removal Rate grams/day |
|--------------------|-------------|------------------------------------|---|---------------------------------------|---|--|
| GWE/SVE-1 | 10/16/01 | 2,000 | 43.6 | 68 | 283 | 503 |
| | 11/2/01 | 2,250 | 49.1 | 15 | 62 | 123 |
| | 12/12/01 | 3,200 | 69.8 | 3 | 12 | 34 |
| | 8/1/02 | 2,200 | 48 | 5 | 21 | 41 |
| | 9/27/02 | 3,400 | 74.2 | 4.9 | 20 | 60 |
| | 10/11/02 | 3,600 | 78.5 | 4.3 | 18 | 58 |
| | 2/11/03 | 4,500 | 98.2 | 3.8 | 16 | 64 |
| GWE/SVE-2 | 10/16/01 | 200 | 4.4 | 615 | 2,557 | 459 |
| | 11/2/01 | 250 | 5.4 | 223 | 927 | 204 |
| | 12/12/01 | 75 | 1.6 | 214 | 890 | 58 |
| | 8/1/02 | 150 | 3.3 | 320 | 1,330 | 179 |
| | 9/27/02 | 300 | 6.5 | 16.9 | 70 | 18.5 |
| | 10/11/02 | 350 | 7.6 | 12.2 | 51 | 16 |
| | 2/11/03 | 150 | 3.3 | 51.6 | 216 | 29 |
| | 2/14/03 | 250 | 5.5 | 50 | 209 | 47 |
| GWE/SVE-3 | 10/16/01 | 1,200 | 26.2 | 391 | 1,625 | 1,736 |
| | 11/2/01 | 1,250 | 27 | 92 | 382 | 420 |
| | 12/12/01 | 650 | 14 | 119 | 495 | 282 |

Table 2. Flow Measurements and Vapor Concentration in Vapor Extraction Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Well I.D. # | Date | Flow Velocity ft/minute | Flow Rate (SCFM)¹ | Vapor Concentration (ppmv) | Vapor Concentration µg/l² | TPH(G) Removal Rate grams/day |
|--------------------|-------------|------------------------------------|---|---------------------------------------|---|--|
| GWE/SVE-3 | 8/1/02 | 1,500 | 32.7 | 278 | 1,156 | 1,540 |
| | 9/27/02 | 1,700 | 37.1 | 5.6 | 23 | 35 |
| | 10/11/02 | 2,000 | 43.6 | 4.3 | 18 | 32 |
| | 2/11/03 | 400 | 8.7 | 55.3 | 231 | 82 |
| | 2/14/03 | 2,000 | 43.6 | 17.2 | 72 | 128 |
| GWE/SVE-4 | 10/16/01 | 90 | 2.0 | 16 | 67 | 5.5 |
| | 11/2/01 | 100 | 2.2 | 17 | 71 | 6 |
| | 12/12/01 | 50 | 1.1 | 2 | 8 | 0.4 |
| | 8/1/02 | 0 | 0 | 54 | 224 | 0 |
| | 9/27/02 | 0 | 0 | 0 | 0 | 0 |
| | 10/11/02 | 0 | 0 | 0 | 0 | 0 |
| | 2/11/03 | 3,000 | 65.4 | 7.6 | 32 | 85 |
| GWE/SVE-5 | 10/16/01 | 550 | 12.0 | 12 | 50 | 24 |
| | 11/2/01 | 175 | 3.8 | 3 | 12 | 2 |
| | 12/12/01 | 150 | 3.2 | 67 | 278 | 36 |
| | 8/1/02 | 2,000 | 43.6 | 0 | 0 | 0 |
| | 9/27/02 | 1,400 | 30.5 | 0 | 0 | 0 |
| | 10/11/02 | 1,500 | 32.7 | 0 | 0 | 0 |

Table 2. Flow Measurements and Vapor Concentration in Vapor Extraction Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Well I.D. # | Date | Flow Velocity ft/minute | Flow Rate (SCFM)¹ | Vapor Concentration (ppmv) | Vapor Concentration µg/l² | TPH(G) Removal Rate grams/day |
|--------------------|-------------|------------------------------------|---|---------------------------------------|---|--|
| GWE/SVE-6 | 2/11/03 | 2,000 | 43.6 | 5.2 | 22 | 39 |
| | 10/16/01 | 3,300 | 72.0 | 165 | 686 | 2,013 |
| | 11/2/01 | 2,750 | 59.5 | 63 | 262 | 635 |
| | 12/12/01 | 2,600 | 56 | 169 | 702 | 1,602 |
| | 8/1/02 | 310 | 6.8 | 0 | 0 | 0 |
| | 9/27/02 | 2,800 | 61.1 | 0 | 0 | 0 |
| | 10/11/02 | 3,200 | 69.8 | 0 | 0 | 0 |
| | 2/11/03 | 3,000 | 65.4 | 3.5 | 15 | 40 |
| GWE/SVE-7 | 10/16/01 | 1,550 | 33.8 | 254 | 1,056 | 1,455 |
| | 11/2/01 | 300 | 6.5 | 63 | 262 | 69 |
| | 12/12/01 | 200 | 4.3 | 122 | 507 | 89 |
| | 8/1/02 | 3,100 | 67.6 | 36.8 | 153 | 421 |
| | 9/27/02 | 3,400 | 74.2 | 23 | 96 | 290 |
| | 10/11/02 | 3,400 | 74.2 | 2.3 | 10 | 30 |
| | 2/11/03 | 1,500 | 32.7 | 6.9 | 29 | 39 |
| | 2/14/03 | 6,000 | 130.8 | 10.3 | 43 | 229 |
| GWE/SVE-8 | 10/16/01 | 3,500 | 76.4 | 288 | 1,198 | 3,731 |
| | 11/2/01 | 550 | 11.9 | 153 | 636 | 308 |

Table 2. Flow Measurements and Vapor Concentration in Vapor Extraction Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Well I.D. # | Date | Flow Velocity ft/minute | Flow Rate (SCFM)¹ | Vapor Concentration (ppmv) | Vapor Concentration µg/l² | TPH(G) Removal Rate grams/day |
|--------------------|-------------|------------------------------------|---|---------------------------------------|---|--|
| GWE/SVE-9 | 12/12/01 | 2,500 | 54 | 122 | 507 | 1,116 |
| | 8/1/02 | 4,500 | 98.2 | 0 | 0 | 0 |
| | 9/27/02 | 4,800 | 104.7 | 0 | 0 | 0 |
| | 10/11/02 | 4,200 | 91.6 | 0.3 | 1 | 4 |
| | 2/11/03 | 3,500 | 76.4 | 3.2 | 13 | 40 |
| GWE-10 | 10/16/01 | 290 | 6.3 | 370 | 1,538 | 395 |
| | 11/2/01 | 100 | 2.2 | 37 | 154 | 14 |
| | 12/12/01 | 300 | 6.5 | 12 | 50 | 13 |
| | 8/1/02 | 5,500 | 120.0 | 89.4 | 372 | 1,819 |
| | 9/27/02 | --- | --- | --- | --- | --- |
| | 10/11/02 | 450 | 9.8 | 1.6 | 7 | 3 |
| | 2/11/03 | 500 | 10.9 | 0.8 | 3 | 1 |

Table 2. Flow Measurements and Vapor Concentration in Vapor Extraction Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Well I.D. # | Date | Flow Velocity ft/minute | Flow Rate (SCFM)¹ | Vapor Concentration (ppmv) | Vapor Concentration $\mu\text{g/l}$² | TPH(G) Removal Rate grams/day |
|--------------------|-------------|------------------------------------|---|---------------------------------------|---|--|
| SVE-11 | 10/16/01 | 2,250 | 49.0 | 118 | 490 | 979 |
| | 11/2/01 | 425 | 9.2 | 36 | 150 | 56 |
| | 12/12/01 | 16 | 0.3 | 8 | 33 | 0.4 |
| | 8/1/02 | 2,600 | 56.7 | 0 | 0 | 0 |
| | 9/27/02 | 2,800 | 61.1 | 0 | 0 | 0 |
| | 10/11/02 | 3,000 | 65.4 | 0 | 0 | 0 |
| | 2/11/03 | 6,000 | 130.9 | 1.1 | 5 | 27 |
| SVE-12 | 10/16/01 | 1,750 | 38.2 | 93 | 387 | 600 |
| | 11/2/01 | 350 | 7.6 | 18 | 75 | 23 |
| | 12/12/01 | 350 | 7.6 | 10 | 42 | 13 |
| | 8/1/02 | 2,900 | 63.3 | 5.2 | 22 | 57 |
| | 9/27/02 | 2,700 | 59.0 | 0 | 0 | 0 |
| | 10/11/02 | 3,500 | 76.3 | 1.6 | 7 | 22 |
| | 2/11/03 | 2,500 | 54.5 | 0.8 | 3 | 7 |

Table 2. Flow Measurements and Vapor Concentration in Vapor Extraction Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Well I.D. # | Date | Flow Velocity ft/minute | Flow Rate (SCFM) ¹ | Vapor Concentration (ppmv) | Vapor Concentration $\mu\text{g/l}$ ² | TPH(G) Removal Rate grams/day |
|-------------|-----------------------|----------------------------|----------------------------------|-------------------------------|---|-------------------------------------|
| SVE-13 | 10/16/01 | 75 | 1.6 | 499 | 2,074 | 135 |
| | 11/2/01 | 100 | 2.2 | 119 | 495 | 44 |
| | 12/12/01 | 175 | 3.8 | 32 | 133 | 21 |
| | 8/1/02 | 65 | 1.4 | 5 | 21 | 1.2 |
| | 9/27/02 ³ | --- | --- | --- | --- | --- |
| | 10/11/02 ³ | --- | --- | --- | --- | --- |
| | 2/11/03 | 75 | 1.6 | 1.1 | 5 | <1 |

Explanation:

SCFM = Standard Cubic Feet per Minute

ppmv = parts per million (volume)

$\mu\text{g/l}$ = micrograms per liter

NOTES:

¹ Flow measured in 2" PVC vapor conduit.

² $\mu\text{g/l}$ values calculated using the following equation: $\mu\text{g/l} = \text{ppmv} \times \text{molecular weight}/24.055$. Assumed molecular weight of gasoline = 100.

³ Well-box obstructed by vehicle on day of measurement

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------|--------------------------|----------------------------|--|
| 5/16/01 | 333,054 | 333,054 | |
| 5/17/01 | 334,485 | 334,485 | 1.0 |
| 5/18/01 | 337,192 | 337,192 | 1.9 |
| 5/21/01 | 341,448 | 341,448 | 1.0 |
| 5/23/01 | 345,424 | 345,424 | 1.4 |
| 6/18/01 | 379,840 | 379,840 | 0.9 |
| 7/3/01 | 400,300 | 400,300 | 0.9 |
| 7/27/01 | 457,596 | 457,596 | 1.7 |
| 8/1/01 | 467,182 | 467,182 | 1.3 |
| 8/10/01 | 481,662 | 481,662 | 1.1 |
| 8/17/01 | 591,601 | 495,282 ² | ¹ _____ |
| 8/20/01 | 592,000 | 492,282 | ³ _____ |
| 8/21/01 | 592,585 | 492,867 | 0.5 |
| 8/28/01 | 602,096 | 502,378 | 0.9 |
| 9/18/01 | 627,180 | 527,462 | 0.8 |
| 9/27/01 | 638,418 | 538,700 | 0.9 |
| 10/5/01 | 648,212 | 548,494 | 0.9 |
| 10/11/01 | 655,388 | 555,670 | 1.1 |
| 10/22/01 | 667,676 | 567,958 | 0.8 |
| 11/2/01 | 678,091 | 578,373 | 0.6 |
| 11/5/01 | 681,100 / 0 ⁴ | 581,382 | 0.7 |
| 11/9/01 | 6,898 | 588,280 | 1.2 |
| 11/14/01 | 14,379 | 595,761 | 1.0 |
| 11/20/01 | 23,124 | 604,506 | 1.0 |
| 12/4/01 | 54,225 | 635,607 | 1.6 |
| 12/10/01 | 72,000 | 653,382 | 2.1 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------|-------------------------|----------------------------|--|
| 12/17/01 | 93,341 | 674,723 | 2.1 |
| 12/26/01 | 127,051 | 708,433 | 2.6 |
| 12/31/01 | 149,385 | 730,767 | 3.1 |
| 1/2/02 | 163,000 | 744,382 | 4.7 |
| 1/11/02 | 166,771 | 748,153 | --- |
| 1/15/02 | 190,661 | 772,043 | 4.3 |
| 1/21/02 | 218,788 | 800,170 | 3.1 |
| 1/29/02 | 254,008 | 835,390 | 3.1 |
| 2/7/02 | 291,624 | 873,006 | 2.9 |
| 2/14/02 | 322,948 | 904,330 | 3.1 |
| 2/21/02 | 350,361 | 931,743 | 2.7 |
| 2/27/02 | 381,973 | 963,355 | 3.6 |
| 3/4/02 | 404,348 | 982,730 | 2.7 |
| 3/11/02 | 436,581 | 1,014,963 | 3.2 |
| 3/19/02 | 473,249 | 1,051,631 | 3.2 |
| 3/29/02 | 522,327 | 1,100,709 | 3.4 |
| 4/5/02 | 554,720 | 1,133,102 | 3.2 |
| 4/19/02 | 607,648 | 1,186,030 | 2.6 |
| 4/26/02 | 705,092 | 1,283,474 | 9.7 |
| 5/2/02 | 729,422 | 1,307,804 | 2.8 |
| 5/6/02 | 764,815 | 1,343,197 | 6.1 |
| 5/8/02 | 771,814 | 1,350,196 | 2.4 |
| 5/16/02 | 799,857 | 1,378,239 | 2.4 |
| 5/21/02 | 817,770 | 1,396,152 | 2.5 |
| 5/29/02 | 848,015 | 1,426,397 | 2.6 |
| 6/7/02 | 881,299 | 1,459,681 | 2.6 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------|-------------------------|----------------------------|--|
| 6/13/02 | 881,880 | 1,460,262 | --- |
| 6/21/02 | 912,812 | 1,491,194 | 2.7 |
| 7/2/02 | 951,716 | 1,530,098 | 2.3 |
| 7/11/02 | 969,631 | 1,540,013 | 1.4 |
| 7/19/02 | 995,237 | 1,565,619 | 2.2 |
| 7/25/02 | 1,010,942 | 1,581,324 | 1.8 |
| 8/1/02 | 1,028,370 | 1,616,180 | 1.7 |
| 8/8/02 | 1,044,852 | 1,632,662 | 1.6 |
| 8/16/02 | 1,055,510 | 1,643,314 | 0.9 |
| 8/21/02 | 1,066,819 | 1,654,623 | 1.6 |
| 8/29/02 | 1,082,857 | 1,670,661 | 1.4 |
| 9/5/02 | 1,096,024 | 1,683,828 | 1.3 |
| 9/13/02 | 1,112,062 | 1,699,866 | 1.4 |
| 10/2/02 | 1,145,714 | 1,733,518 | 1.2 |
| 10/11/02 | 1,172,292 | 1,760,096 | 2.1 |
| 10/18/02 | 1,177,193 | 1,764,997 | --- |
| 10/30/02 | 10,352 | 1,775,193 | --- |
| 11/1/02 | 13,802 | 1,778,799 | 2.4 |
| 11/5/02 | 19,338 | 1,784,335 | 1.0 |
| 11/11/02 | 25,831 | 1,790,828 | 0.8 |
| 11/22/02 | 54,157 | 1,819,154 | 1.8 |
| 12/4/02 | 72,416 | 1,837,413 | 1.1 |
| 12/13/02 | 89,375 | 1,854,372 | 1.3 |
| 12/20/02 | 134,082 | 1,899,079 | 4.4 |
| 12/30/02 | 190,593 | 1,955,590 | 3.9 |
| 1/3/03 | 215,750 | 1,980,747 | 4.4 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|---------|-------------------------|----------------------------|--|
| 1/10/03 | 248,269 | 2,013,266 | 3.2 |
| 1/16/03 | 279,443 | 2,044,440 | 3.6 |
| 1/29/03 | 345,364 | 2,110,361 | 3.5 |
| 2/7/03 | 390,854 | 2,155,851 | 3.5 |
| 2/11/03 | 408,237 | 2,173,234 | 3.0 |
| 2/13/03 | 415,355 | 2,180,352 | 2.5 |
| 2/18/03 | 438,355 | 203,352 | 3.2 |
| 2/28/03 | 482,319 | 2,247,316 | 3.1 |
| 3/11/03 | 529,021 | 2,294,018 | 2.9 |
| 3/18/03 | 559,049 | 2,324,046 | 3.0 |
| 3/28/03 | 603,783 | 2,368,780 | 3.1 |
| 4/10/03 | 664,796 | 2,429,793 | 3.2 |
| 4/18/03 | 702,565 | 2,467,562 | 3.3 |
| 4/25/03 | 737,250 | 2,502,247 | 3.4 |
| 5/2/03 | 774,884 | 2,539,881 | 3.7 |
| 5/14/03 | 844,660 | 2,609,657 | 4.0 |
| 5/22/03 | 890,318 | 2,655,315 | 4.0 |
| 5/29/03 | 910,691 | 2,675,688 | 2.0 |
| 6/6/03 | 953,142 | 2,718,139 | 3.7 |
| 6/17/03 | 1,012,384 | 2,777,381 | 3.7 |
| 6/20/03 | 1,028,586 | 2,793,583 | 3.8 |
| 6/27/03 | 1,075,339 | 2,840,336 | 4.6 |
| 7/3/03 | 1,089,455 | 2,854,452 | 1.6 |
| 7/11/03 | 1,098,458 | 2,863,455 | 0.8 |
| 7/17/03 | 1,157,284 | 2,922,281 | 6.8 |
| 7/25/03 | 1,196,119 | 2,961,116 | 3.4 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------|-------------------------|----------------------------|--|
| 7/30/03 | 1,217,345 | 2,982,342 | 2.9 |
| 8/8/03 | 1,277,728 | 3,042,779 | 4.7 |
| 8/14/03 | 1,306,709 | 3,071,706 | 3.3 |
| 8/19/03 | 1,322,407 | 3,087,404 | 2.2 |
| 8/29/03 | 1,332,846 | 3,097,843 | 0.7 |
| 9/5/03 | 1,347,945 | 3,112,942 | 1.5 |
| 9/12/03 | 1,351,475 | 3,116,742 | 0.4 |
| 9/26/03 | 1,370,697 | 3,135,694 | 0.9 |
| 10/3/03 | 1,379,064 | 3,144,061 | 0.8 |
| 10/10/03 | 1,386,120 | 3,151,117 | 0.7 |
| 10/17/03 | 1,391,959 | 3,156,956 | 0.6 |
| 10/24/03 | 1,397,544 | 3,162,541 | 0.6 |
| 10/31/03 | 1,403,823 | 3,168,820 | 0.6 |
| 11/7/03 | 1,410,468 | 3,175,465 | 0.7 |
| 11/18/03 | 1,412,090 | 3,177,087 | 0.1 |
| 12/5/03 | 1,425,363 | 3,190,360 | 0.5 |
| 12/22/03 | 1,436,251 | 3,201,248 | 0.4 |
| 12/30/03 | 1,439,644 | 3,204,641 | 0.3 |
| 1/7/04 | 1,440,581 | 3,205,578 | 0.1 |
| 1/14/04 | 1,445,512 | 3,210,509 | 0.5 |
| 1/29/04 | 1,489,433 | 3,254,430 | 2.0 |
| 2/13/04 | 1,516,076 | 3,281,073 | 1.2 |
| 2/27/04 | 1,544,114 | 3,309,111 | 1.4 |
| 3/3/04 | 1,554,424 | 3,319,421 | 1.4 |
| 3/10/04 | 1,568,474 | 3,333,471 | 1.4 |
| 3/16/04 | 1,578,867 | 3,343,864 | 1.2 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|---------|-------------------------|----------------------------|--|
| 3/25/04 | 1,595,581 | 3,360,578 | 1.3 |
| 3/31/04 | 1,597,170 | 3,362,167 | 0.2 |
| 4/9/04 | 1,611,753 | 3,376,750 | 1.1 |
| 4/16/04 | 1,621,268 | 3,386,265 | 0.9 |
| 4/23/04 | 1,629,798 | 3,394,795 | 0.8 |
| 5/3/04 | 1,636,948 | 3,401,945 | 0.4 |
| 5/4/04 | 1,636,997 | 3,401,994 | 0 ⁸ |
| 5/10/04 | 1,643,162 | 3,408,159 | 0.7 |
| 5/21/04 | 1,653,412 | 3,418,409 | 0.6 |
| 5/28/04 | 1,659,764 | 3,424,761 | 0.6 |
| 6/4/04 | 1,665,917 | 3,430,914 | 0.6 |
| 6/14/04 | 1,668,218 | 3,433,215 | 0.2 |
| 6/22/04 | 1,670,654 | 3,435,651 | 0.2 |
| 7/2/04 | 1,677,769 | 3,442,766 | 0.5 |
| 7/16/04 | 1,688,358 | 3,453,355 | 0.5 |
| 7/19/04 | 1,693,629 | 3,458,626 | 1.3 |
| 7/23/04 | 1,703,653 | 3,468,650 | 1.7 |
| 7/30/04 | 1,714,343 | 3,479,340 | 1.1 |
| 8/6/04 | 1,721,680 | 3,486,677 | 0.7 |
| 8/13/04 | 1,721,680 | 3,493,733 | 0.7 ⁹ |
| 8/20/04 | 1,721,804 | 3,500,789 | 0.7 ⁹ |
| 8/26/04 | 1,721,804 | 3,506,837 | 0.7 ⁹ |
| 8/27/04 | 1,722,930 | 3,507,963 | 0.8 |
| 9/1/04 | 1,727,430 | 3,509,463 | 0.6 |
| 9/7/04 | 1,732,954 | 3,517,987 | 0.6 |
| 9/10/04 | 1,735,768 | 3,520,801 | 0.6 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------|-------------------------|----------------------------|--|
| 9/17/04 | 1,741,255 | 3,526,288 | 0.6 |
| 9/24/04 | 1,744,090 | 3,529,123 | 0.3 |
| 10/1/04 | 1,744,238 | 3,529,271 | 0 |
| 10/4/04 | 1,744,264 | 3,529,297 | 0 ¹⁰ |
| 10/5/04 | 1,746,297 | 3,531,330 | 1.4 |
| 10/8/04 | 1,749,826 | 3,534,859 | 0.8 |
| 10/11/04 | 1,752,815 | 3,537,848 | 0.7 |
| 10/22/04 | 1,754,363 | 3,563,352 | 1.6 ¹¹ |
| 10/29/04 | 1,756,580 | 3,579,480 | 1.6 ¹¹ |
| 11/4/04 | 622 | 3,593,416 | 1.6 ^{11, 12} |
| 11/5/04 | 2,534 | 3,595,328 | 1.4 |
| 11/12/04 | 16,804 | 3,609,598 | 1.4 |
| 12/6/04 | 64,735 | 3,657,529 | 1.4 |
| 12/17/04 | 87,937 | 3,680,731 | 2.0 |
| 12/23/04 | 106,802 | 3,699,596 | 1.4 |
| 12/30/04 | 130,647 | 3,723,441 | 2.4 |
| 1/5/05 | 156,935 | 3,749,729 | 3.13 |
| 1/6/05 | 163,038 | 3,755,832 | 3.39 |
| 1/14/05 | 188,997 | 3,781,791 | 2.27 |
| 1/28/05 | 206,004 | 3,798,798 | 0.84 |
| 2/7/05 | 257,671 | 3,850,465 | 3.61 |
| 2/14/05 | 275,063 | 3,867,857 | 1.70 |
| 3/4/05 | 347,248 | 3,940,042 | 2.78 |
| 3/10/05 | 378,996 | 3,971,790 | 3.73 |
| 3/21/05 | 425,475 | 4,018,269 | 2.96 |
| 4/1/05 | 471,716 | 4,064,510 | 2.90 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------|-------------------------|----------------------------|--|
| 4/6/05 | 486,288 | 4,079,082 | 2.02 |
| 4/8/05 | 497,476 | 4,090,270 | 3.88 |
| 4/15/05 | 527,243 | 4,120,037 | 2.95 |
| 4/22/05 | 553,539 | 4,146,333 | 2.61 |
| 5/2/05 | 602,308 | 4,195,102 | 3.39 |
| 5/6/05 | 613,012 | 4,205,806 | 1.86 |
| 5/16/05 | 651,533 | 4,244,327 | 2.50 |
| 7/5/05 | 651,533 | 4,244,327 | 0.00 |
| 7/22/05 | 739,986 | 4,332,780 | 3.61 |
| 7/29/05 | 773,192 | 4,365,986 | 3.29 |
| 8/5/05 | 801,337 | 4,394,131 | 2.79 |
| 8/12/05 | 827,552 | 4,420,346 | 2.60 |
| 8/19/05 | 852,397 | 4,445,191 | 2.46 |
| 8/21/05 | 855,601 | 4,448,395 | 1.11 |
| 8/26/05 | 875,312 | 4,468,106 | 2.73 |
| 9/2/05 | 892,192 | 4,484,986 | 1.67 |
| 9/9/05 | 908,580 | 4,501,374 | 1.62 |
| 9/19/05 | 923,094 | 4,515,888 | 1.01 |
| 9/23/05 | 936,118 | 4,528,912 | 2.26 |
| 10/3/05 | 953,125 | 4,545,919 | 0.98 ¹³ |
| 10/7/05 | 953,304 | 4,546,098 | 0.00 |
| 10/14/05 | 953,994 | 4,546,788 | 0.00 |
| 10/21/05 | 953,994 | 4,546,788 | 0.00 |
| 10/28/05 | 972,784 | 4,565,578 | 1.86 |
| 11/4/05 | 987,065 | 4,579,859 | 1.42 |
| 11/14/05 | 1,012,997 | 4,605,791 | 1.80 |

Table 3. Groundwater Extraction System Totalizer Readings - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Date | Totalizer Reading (gal) | Total Discharged (gallons) | Average Flow Rate Since Previous Reading (gal/min) |
|----------------|-------------------------|----------------------------|--|
| 12/2/05 | 1,053,358 | 4,646,152 | 1.56 |
| 12/9/05 | 1,082,403 | 4,675,197 | 2.88 |
| 12/16/05 | 1,108,495 | 4,701,289 | 2.59 |
| 12/23/05 | 1,140,592 | 4,733,386 | 3.18 |
| 12/28/05 | 1,168,602 | 4,761,396 | 3.89 |
| 1/10/06 | 1,168,602 | 4,761,396 | 0.0¹⁴ |
| 1/13/06 | 1,169,780 | 4,762,574 | 0.27 |
| 1/17/06 | 1,200,094 | 4,792,888 | 5.26 |
| 1/20/06 | 1,221,442 | 4,814,236 | 4.94 |
| 1/27/06 | 1,260,101 | 4,852,895 | 3.84 |
| 2/10/06 | 1,317,450 | 4,910,244 | 2.84 |
| 2/17/06 | 1,354,114 | 4,946,908 | 3.64 |
| 2/24/06 | 1,386,769 | 4,979,563 | 3.24 |
| 3/1/06 | 1,409,408 | 5,002,202 | 3.14 |
| 3/16/06 | 1,409,408 | 5,002,202 | 0.00¹⁵ |
| 3/20/06 | 1,448,654 | 5,041,448 | 6.81 |
| 3/24/06 | 1,474,123 | 5,066,917 | 4.42 |
| 3/31/06 | 1,517,166 | 5,109,960 | 4.27 |

NOTES:

¹ 8/17/01 meter reading is incorrect due to system malfunction.

² Discharge for period between 8/17/01 and 8/20/01 is calculated at 1 gallon per minute.

³ System inoperative between 8/17/01 and 8/20/01.

⁴ New flow totalizer installed 11/5/01 at 1:00 PM.

⁵ System inoperative between 1/02/02 and 1/10/02 for carbon vessel recharge and carbon vessel repair.

⁶ System inoperative between 6/7/02 and 6/13/02 due to compressor failure.

⁷ Totalizer malfunctioned and reset to zero on 10/18/02.

⁸ System inoperative between 5/3/04 and 5/4/04 due to compressor malfunction.

⁹ System operating but totalizer inoperative between 8/6/04 and 8/26/04. Average flow rate for the quarter was used to estimate actual flow rate.

¹⁰ System inoperative between 10/1/04 and 10/4/04.

¹¹ System operating but totalizer inoperative. Average flow rate for the quarter was used to estimate actual flow rate.

¹² New flow totalizer installed 11/4/04. Readings begin at 622 gallons.

¹³ System inoperative between 9/30/05 and 10/21/05 for compressor replacement.

¹⁴ System was turned off on 12/28/05 per City Sewer Department due to unusually high rainfall. System was reactivated on 1/10/06.

¹⁵ System was turned off on 3/1/06 due to suspected carbon fouling. System was reactivated on 3/16/06.

Table 4. Influent Analytical Results - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Sample ID | Date | TPPH(G) | TPH(D) | Benzene | Toluene | Ethyl Benzene | Xylenes | MTBE |
|------------|---------------------|-----------------|--------|---------|---------|---------------|---------|---------------------|
| | | <-----PPB-----> | | | | | | |
| Influent | 2/2/01 ¹ | ____ | ____ | 310 | 56 | 84 | 130 | ____ |
| Influent | 2/8/01 ¹ | 9,300 | <50 | ____ | ____ | ____ | ____ | 38,000 |
| Influent | 5/17/01 | 6,500 | <50 | 1.3 | 3.2 | 2.2 | 7.3 | ____ |
| Influent | 5/21/01 | 2,500 | 210 | <12.5 | <12.5 | <12.5 | <12.5 | 4,200 ² |
| Influent A | 8/13/01 | 12,000 | 1900 | 490 | 400 | 95 | 1000 | 8,200 ³ |
| Influent B | 8/13/01 | 1,500 | 1200 | 130 | 7.7 | 5.1 | 55 | 1,900 ⁴ |
| Influent A | 8/23/01 | 1,600 | 1400 | 170 | 6.1 | 4.1 | 26 | 2,200 ⁵ |
| Influent B | 8/23/01 | 2,000 | 1800 | 72 | 18 | <2.5 | 83 | 6,500 ⁶ |
| Influent A | 11/20/01 | 1,900 | 720 | 48 | 16 | <5 | 93 | 4,500 ⁷ |
| Influent B | 11/20/01 | 2,700 | 1,500 | 52 | 53 | <25 | 140 | 3,700 ⁸ |
| Influent A | 2/14/02 | 570 | 1,800 | 50 | 6.1 | 28 | 78 | 310 ⁹ |
| Influent B | 2/14/02 | 74 | 110 | 1.4 | 7.9 | <0.50 | 6.9 | 3,600 ¹⁰ |
| Influent A | 5/6/02 | 84 | 160 | 4.9 | 0.58 | 1.6 | 3.9 | 690 ² |
| Influent B | 5/6/02 | 940 | 1,300 | <5 | 220 | 14 | 111 | 1,600 ² |
| Influent A | 8/8/02 | 530 | 300 | 11 | 7.6 | 2.5 | 18 | 420 ² |
| Influent B | 8/8/02 | 460 | 970 | 5.9 | 3.6 | 1.1 | 10 | 690 ² |

Table 4. Influent Analytical Results - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| Sample ID | Date | TPPH(G) | TPH(D) | Benzene | Toluene | Ethyl Benzene | Xylenes | MTBE |
|-----------------|----------------|-----------------|-------------------|-----------|----------------|----------------|-----------|--------------------------|
| | | <-----PPB-----> | | | | | | |
| Influent A | 11/05/02 | 730 | 380 | <0.5 | <0.5 | <0.5 | <1 | 3,700 ¹¹ |
| Influent B | 11/05/02 | 84 | 580 | 7.8 | 4.4 | <2.5 | 23 | 780 ² |
| Influent A | 2/18/03 | 360 | 240 | 5.6 | <0.5 | 0.71 | 1.5 | 4,300 ² |
| Influent B | 2/18/03 | 1,300 | <63 | <2.5 | <2.5 | <2.5 | <2.5 | 1,900 ² |
| Influent A | 5/14/03 | 120 | 530 | 1.4 | <1 | <1 | <1 | 1,100 ¹² |
| Influent B | 5/14/03 | 440 | 200 | 4.9 | 2.2 | 1.3 | 8.5 | 1,200 ² |
| Influent A | 8/14/03 | 220 | 230 | 2.0 | <0.5 | 0.69 | 3.1 | 360 ¹³ |
| Influent B | 8/14/03 | 210 | 330 | 6.6 | <0.5 | 0.62 | <1 | 280 ¹³ |
| Influent | 12/22/03 | 160 | 630 | 13 | <0.5 | <0.5 | 1.3 | 110 ¹⁴ |
| Influent | 3/16/04 | 240 | 250 | 7.0 | 0.52 | <1 | 4.5 | 390 |
| Influent | 5/11/04 | 540 | <50 | <5 | <5 | <5 | <5 | 760 |
| Influent | 7/22/04 | 410 | <50 | 8.4 | <5 | <5 | <5 | 600 |
| Influent | 10/4/04 | 200 | 1,800 | 30 | <2.5 | <2.5 | <5 | 190 |
| Influent | 1/5/05 | <50 | <50 ¹⁵ | 10 | <2.5 | <2.5 | 6.7 | 530 |
| Influent | 4/6/05 | 260 | 190 | <2.5 | <2.5 | <2.5 | <2.5 | 370 |
| Influent | 7/6/05 | 270 | 350 | 12 | <2.5 | <2.5 | 2.7 | 360 |
| Influent | 10/3/05 | <250 | 75 | <2.5 | <2.5 | <2.5 | <2.5 | 84 |
| Influent | 1/11/06 | 370 | 570 | 17 | <2.5 | <2.5 | 12 | 300 ¹⁶ |

Table 4. Influent Analytical Results - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

Explanation:

TPPH(G) = total purgeable petroleum hydrocarbons as gasoline
TPH(D) = total purgeable petroleum hydrocarbons as diesel
MTBE = methyl tertiary butyl ether
ppb = part per billion
TBA = tertiary butanol
TAME = tertiary amyl methyl ether

NOTES:

¹ Samples dated 2/2/01 and 2/8/01 collected by Earth Engineers. 2/8/01 sample was analyzed for VOCs by EPA Method 8260. Consult analytical laboratory results for other analytes detected.

² Other oxygenates not detected.

³ TAME and TBA also detected at 190 and 2,600 ppb respectively. Other oxygenates not detected.

⁴ TBA also detected at 950 ppb. Other oxygenates not detected.

⁵ TBA also detected at 810 ppb. Other oxygenates not detected.

⁶ TBA also detected at 1,600 ppb. Other oxygenates not detected.

⁷ TBA also detected at 640 ppb. Other oxygenates not detected.

⁸ TBA also detected at 810 ppb. Other oxygenates not detected.

⁹ TAME and 1,2 Dichloroethane also detected at 5.7 and 2.8 ppb respectively. Other oxygenates not detected.

¹⁰ TAME also detected at 66 ppb. Other oxygenates not detected.

¹¹ TBA also detected at 760 ppb. Other oxygenates not detected.

¹² TBA also detected at 350 ppb. Other oxygenates not detected.

¹³ TBA detected in Influent A and Influent B at 80 and 93 ppb respectively. Other oxygenates not detected.

¹⁴ TBA detected in Influent sample at 44 ppb. Other oxygenates not detected.

¹⁵ 430 ppb light Oil is in the sample (C12-C36. No Diesel pattern).

¹⁶ TBA detected at 380 ppb. The oxygenates ETBE, TAME, and DIPE were not detected.

Table 5: Water Levels in Pumping Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, CA

| Date | PMCS #1 | PMCS #2 | PMCS #3 | PMCS #4 | PMCS #5 | PMCS #6 | GWE/SVE #1 | GWE/SVE #2 | GWE/SVE #3 | GWE/SVE #4 | GWE/SVE #5 | GWE/SVE #6 | GWE/SVE #7 | GWE/SVE #8 | GWE/SVE #9 | GWE #10 |
|---------------------------------|---------|---------|---------|---------|---------|---------|------------|------------|------------|------------|------------|------------|------------|------------|------------|---------|
| <-----Depth to Water (Ft)-----> | | | | | | | | | | | | | | | | |
| 2/15/01 | 33.9 | 28.2 | 26.3 | 26.1 | 26.0 | 25.35 | - | - | - | - | - | - | - | - | - | - |
| 5/16/01 | 15.16 | 15.31 | 16.05 | 16.24 | 14.72 | 13.32 | - | - | - | - | - | - | - | - | - | - |
| 5/17/01 | - | 23.53 | 26.15 | 22.75 | 24.88 | 24.87 | - | - | - | - | - | - | - | - | - | - |
| 5/21/01 | - | 23.52 | 26.15 | 24.82 | 24.91 | 24.90 | - | - | - | - | - | - | - | - | - | - |
| 6/18/01 | - | 23.5 | 26.12 | 24.83 | 24.92 | 24.90 | - | - | - | - | - | - | - | - | - | - |
| 7/5/01 | - | - | - | - | - | - | 24.15 | 24.50 | 20.55 | 24.01 | 24.21 | 23.48 | 25.22 | 23.19 | 22.84 | 15.51 |
| 7/27/01 | 24.62 | 23.53 | 26.08 | 24.80 | 24.88 | 24.87 | 24.08 | 29.40 | 20.42 | 23.90 | 24.10 | 23.41 | 25.09 | 23.10 | 23.01 | 15.45 |
| 8/14/01 | - | 23.51 | 26.11 | 22.89 | 24.89 | 24.90 | 22.30 | 28.75 | 22.2 | 23.81 | - | - | - | - | - | - |
| 8/17/01 | 24.80 | 23.62 | 26.12 | 24.79 | 24.90 | 24.92 | - | - | - | - | - | - | - | - | - | - |
| 9/18/01 | - | 23.49 | 26.12 | 24.81 | 24.92 | 24.92 | 23.96 | 29.51 | 20.53 | 23.90 | 24.10 | 23.46 | 25.11 | 23.18 | 23.01 | 15.81 |
| 9/27/01 | - | 23.51 | 26.10 | 24.10 | 25.42 | 25.40 | - | - | - | - | - | - | - | - | - | - |
| 10/11/01 | - | - | - | - | - | - | 24.02 | 29.41 | 20.52 | 23.90 | 24.12 | 23.46 | 25.14 | 23.18 | 22.91 | 15.45 |
| 11/2/01 | 24.80 | 23.50 | 26.10 | 25.40 | 25.40 | 25.45 | 24.05 | 29.45 | 20.50 | 23.95 | 24.15 | 23.40 | 25.14 | 23.15 | 22.96 | 15.40 |
| 12/4/01 | 24.62 | 23.60 | 26.00 | 25.70 | 25.80 | 25.70 | 24.03 | 29.40 | 20.40 | 23.80 | 24.15 | 23.30 | 25.30 | 23.20 | 22.90 | 15.50 |
| 2/28/02 | --- | 23.5 | 26.0 | 22.5 | 25.0 | 25.0 | 24.0 | 22.0 | 22.6 | 24.0 | 23.3 | 23.3 | 24.0 | 23.0 | 23.0 | 15.0 |
| 5/8/02 | --- | 23.51 | 26.42 | 23.10 | 24.86 | 23.70 | 23.97 | 14.65 | 22.05 | 23.80 | 24.15 | 23.34 | 22.19 | 22.27 | 11.85 | 12.16 |
| 8/1/02 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |
| 8/21/02 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |

Table 5: Water Levels in Pumping Wells - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, CA

| Date | PMCS #1 | PMCS #2 | PMCS #3 | PMCS #4 | PMCS #5 | PMCS #6 | GWE/ SVE #1 | GWE/ SVE #2 | GWE/ SVE #3 | GWE/ SVE #4 | GWE/ SVE #5 | GWE/ SVE #6 | GWE/ SVE #7 | GWE/S VE #8 | GWE/S VE #9 | GWE #10 |
|---------|---------------------------------|--------------|--------------|--------------|--------------|-------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------|----------------|-------------|
| | <-----Depth to Water (Ft)-----> | | | | | | | | | | | | | | | |
| 11/1/02 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |
| 1/29/02 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |
| 4/25/03 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |
| 7/25/03 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |
| 3/16/04 | 24.60 | 23.65 | 30.60 | 30.35 | 25.40 | 24.80 | 24.00 | 29.40 | 22.50 | 23.90 | 24.10 | 23.35 | 23.95 | 23.07 | 22.9 | 15.36 |
| 10/8/04 | --- | 23.50 | 28.06 | 17.83 | --- | 24.56 | 23.95 | 29.35 | 22.50 | 23.30 | 24.10 | 23.30 | 25.25 | 23.02 | 22.85 | --- |
| 4/22/05 | 26.30 | 23.44 | 25.95 | 12.19 | 24.72 | 18.61 | 10.55 | 29.50 | 10.51 | 8.80 | 24.23 | 12.45 | 22.76 | 23.15 | 22.90 | --- |
| 9/9/05 | --- | 26.02 | 14.12 | 23.44 | 24.78 | 24.40 | --- | --- | 22.62 | --- | --- | 23.45 | 25.30 | 23.15 | --- | 15.50 |
| 1/27/06 | --- | 14.95 | 12.40 | 24.27 | 24.79 | 9.21 | 10.26 | 11.88 | 23.75 | 9.57 | 11.49 | 13.40 | --- | 22.15 | --- | 8.78 |

Note: If water level in pumping well is below Top of Pump, measurement is to Top of Pump only.

Note: System inoperative from 4/30/01 to 5/16/01. PMCS wells reactivated 5/16/01.

Note: Water levels shown in table increased by 1 ft from water levels measured in field due to depth of casing in well boxes.

Main GWE system reactivated 6/15/01.

Table 6. Sparge Point Flow Rates - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| DATE | AS #1 | AS #2 | AS #3 | AS #4 | AS #5 | AS #6 | AS #7 | AS #8 | AS #9 | AS #10 | AS #11 | AS #12 | AS #13 | AS #14 |
|----------|--|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| | <-----Flow Rate (Standard Cubic Feet Per Minute)-----> | | | | | | | | | | | | | |
| 7/5/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 7/23/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 7/27/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 8/1/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 8/10/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 8/28/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 9/10/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 9/27/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 10/4/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 10/9/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 |
| 10/16/01 | ≤2 | ≤2 | ≤2 | ≤2 | ≤2 | 4 | ≤2 | 4 | ≤2 | 10 | 4 | ≤2 | ≤2 | ≤2 |
| 10/25/01 | ≤2 | ≤2 | 6 | 3 | 5 | 6 | 3 | 4 | 4 | 7 | 10 | 8 | 4 | 8 |
| 11/2/01 | 5 | --- | 6 | 6 | 6 | 7 | 2 | 5 | 5 | 7 | 6 | 6 | 6 | 6 |
| 11/20/01 | 5 | --- | 7 | 6 | 6 | 7 | 2 | 7 | 7 | 5 | 6 | 6 | 7 | 6 |
| 12/12/01 | 5 | --- | 7 | 4 | 6 | 9 | 2 | 6 | 7 | 6 | 9 | 7 | 8 | 7 |
| 2/7/02 | 5 | --- | 5 | 5 | 7 | 8 | 3 | 5 | 6 | 5 | 6 | 5 | 6 | 5 |
| 2/21/02 | 8 | --- | 5 | 5 | 5 | 4 | 6 | 4 | 8 | 6 | 8 | 5 | 8 | 8 |
| 3/5/02 | 8 | --- | 5 | 5 | 4 | 5 | 5 | 5 | 8 | 5 | 8 | 5 | 8 | 8 |
| 3/14/02 | 8 | --- | 5 | 5 | 5 | 4 | 6 | 4 | 8 | 6 | 8 | 5 | 8 | 8 |

Table 6. Sparge Point Flow Rates - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

Table 6. Sparge Point Flow Rates - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| 5/8/03 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 5 | 0 - 2 | 0 - 2 | 4 |
|----------|-----------------------------|-------|-------|-------|----------------------------|---------------------|-------|-----------------|-------|--------------------------------|-------|-------|-------|-------|
| 7/11/03 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 |
| 8/29/03 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 | 0 - 2 |
| DATE | Operating Air Sparge Points | | | | Flow per AS Point (CFM) | Total Flow (CFM) | | Operating Hours | | Notes | | | | |
| 9/12/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | | | all points set to 1cfm or less | | | | |
| 9/26/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 335 | | | | | | |
| 10/3/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 166 | | | | | | |
| 10/10/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 168 | | | | | | |
| 10/17/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 158 | | | | | | |
| 10/24/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 168 | | | | | | |
| 10/31/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 167 | | | | | | |
| 11/19/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 456 | | | | | | |
| 12/22/03 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 609 | | | | | | |
| 1/7/04 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | --- | | flow meter inoperative | | | | |
| 1/14/04 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | --- | | flow meter inoperative | | | | |
| 1/29/04 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 0 | | | | | | |
| 2/13/04 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 719 | | | | | | |
| 2/27/04 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 332 | | | | | | |
| 3/3/04 | AS #1 - AS #14 | | | | 0 - 1 | 0 - 14 | | 124 | | | | | | |

Table 6. Sparge Point Flow Rates - Redwood Oil Company Bulk Plant, 455 Yolanda, Santa Rosa, California

| DATE | Operating Air Sparge Points | Flow per AS Point (CFM) | Total Flow (CFM) | Operating Hours | Notes |
|----------|-----------------------------|----------------------------|---------------------|-----------------|--------------------------------|
| 3/10/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 0 | |
| 3/16/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 0 | |
| 3/25/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 0 | |
| 3/31/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 0 | |
| 4/9/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 0 | |
| 5/4/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | --- | flow meter inoperative |
| 6/4/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 746 | |
| 7/9/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | --- | flow meter inoperative |
| 8/2/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 739 | |
| 8/26/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 547 | |
| 12/30/04 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 2643 | readings switched to quarterly |
| 3/21/05 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 1508 | |
| 4/24/05 | AS #1 - AS #14 | 0 - 1 | 0 - 14 | 699 | system deactivated |

Notes: Two standard cubic feet per minute is the lowest reading available on flow meter

¹ AS system inoperative between 8/16/02 and 9/9/02 during cyclic shutdown of SVE system

² System functioning but flow meters inoperative

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|--------------------------|---------------------------------------|
| MW-1 | 01/11/91 | --- | 102.77 | --- | -- | 9 - 24 | 7 - 24 | 0 - 7 | |
| | 02/08/91 | --- | | --- | --- | | | | |
| | 03/08/91 | --- | | --- | --- | | | | |
| | 06/13/91 | 22.02 | | 80.75 | 0.00 | | | | |
| | 07/09/91 | 22.22 | | 80.55 | 0.00 | | | | |
| | 08/01/91 | 22.00 | | 80.77 | 0.00 | | | | |
| | 08/29/91 | 21.73 | | 81.04 | 0.00 | | | | |
| | 09/11/91 | 21.75 | | 81.02 | 0.00 | | | | |
| | 10/08/91 | 22.04 | | 80.73 | 0.00 | | | | |
| | 11/08/91 | 22.23 | | 80.54 | 0.00 | | | | |
| | 12/11/91 | --- | | --- | 0.00 | | | | |
| | 01/13/92 | 21.41 | | 81.36 | 0.00 | | | | |
| | 02/11/92 | 20.25 | | 82.52 | 0.00 | | | | |
| | 03/11/92 | 12.79 | | 89.98 | 0.00 | | | | |
| | 04/13/92 | 13.76 | | 89.01 | 0.00 | | | | |
| | 05/15/92 | 15.49 | | 87.28 | 0.00 | | | | |
| | 06/15/92 | 16.85 | | 85.92 | 0.00 | | | | |
| | 07/16/92 | 17.74 | | 85.03 | 0.00 | | | | |
| | 08/18/92 | 17.56 | | 85.21 | 0.00 | | | | |
| | 09/18/92 | 18.62 | | 84.15 | 0.00 | | | | |
| | 12/08/92 | 18.38 | | 84.39 | 0.00 | | | | |
| | 03/10/93 | 13.29 | | 89.48 | 0.00 | | | | |
| | 06/04/93 | 12.77 | | 90.00 | 0.00 | | | | |
| | 10/14/93 | 23.66 | 102.78 | 79.11 | 0.00 | | | | |
| | 04/11/94 | 14.58 | | 88.19 | 0.00 | | | | |
| | 10/19/94 | 14.51 | | 88.26 | 0.00 | | | | |
| | 04/11/95 | 9.18 | | 93.59 | 0.00 | | | | |
| | 03/06/96 | 10.16 | | 92.61 | 0.00 | | | | |
| | 10/14/96 | 12.36 | | 90.42 | 0.00 | | | | Top of casing elevations re-surveyed. |
| | 04/09/97 | 10.75 | | 92.03 | 0.00 | | | | |
| | 10/29/97 | 13.28 | | 89.50 | 0.00 | | | | |
| | 04/07/98 | 8.06 | | 94.72 | 0.00 | | | | |
| | 10/07/98 | 11.51 | | 91.27 | 0.00 | | | | |
| | 04/07/99 | 8.71 | | 94.07 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|-------------|-------------|----------|----------------------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-1 | 10/19/99 | 11.98 | 102.78 146.16 148.81 | 90.80 | 0.00 | 9 - 24 | 7 - 24 | 0 - 7 | |
| | 04/26/00 | --- | | --- | 0.00 | | | | Well inaccessible due to construction activities. |
| | 10/30/00 | 11.41 | | 134.75 | 0.00 | | | | Top of casing elevations re-surveyed. |
| | 02/01/01 | 11.28 | | 134.88 | 0.00 | | | | |
| | 04/23/01 | 14.29 | | 131.87 | 0.00 | | | | |
| | 07/23/01 | 14.88 | | 131.28 | 0.00 | | | | |
| | 10/23/01 | 16.46 | | 129.70 | 0.00 | | | | |
| | 01/21/02 | 12.77 | | 136.04 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 12.80 | | 136.01 | 0.00 | | | | |
| | 07/22/02 | 13.20 | | 135.61 | 0.00 | | | | |
| | 10/22/02 | 13.76 | | 135.05 | 0.00 | | | | |
| | 01/27/03 | 13.00 | | 135.81 | 0.00 | | | | |
| | 04/21/03 | 12.85 | | 135.96 | 0.00 | | | | |
| | 07/21/03 | 13.36 | | 135.45 | 0.00 | | | | |
| | 01/20/04 | 10.04 | | 138.77 | 0.00 | | | | |
| | 07/19/04 | 13.04 | | 135.77 | 0.00 | | | | |
| | 01/18/05 | 9.96 | | 138.85 | 0.00 | | | | |
| | 07/12/05 | 9.40 | | 139.41 | 0.00 | | | | |
| | 02/01/06 | 8.69 | | 140.12 | 0.00 | | | | |
| MW-2 | 01/11/91 | 21.36 | 102.18 | 80.82 | 0.00 | 10 - 25 | 7.5 - 25 | 0 - 7.5 | |
| | 02/08/91 | 18.24 | | 83.94 | 0.00 | | | | |
| | 03/08/91 | 16.52 | | 85.66 | 0.00 | | | | |
| | 06/13/91 | 20.95 | | 81.23 | 0.00 | | | | |
| | 07/09/91 | 20.98 | | 81.20 | 0.00 | | | | |
| | 08/01/91 | 20.98 | | 81.20 | 0.00 | | | | |
| | 08/29/91 | 21.28 | | 80.90 | 0.00 | | | | |
| | 09/11/91 | 21.36 | | 80.82 | 0.00 | | | | |
| | 10/08/91 | 21.83 | | 80.25 | 0.22 | | | | |
| | 11/08/91 | 20.56 | | 81.62 | 0.00 | | | | |
| | 12/11/91 | 21.08 | | 81.10 | 0.00 | | | | |
| | 01/13/92 | 18.56 | | 83.62 | 0.00 | | | | |
| | 02/11/92 | 14.30 | | 87.88 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-2 | 03/11/92 | 11.81 | 102.18 | 90.37 | 0.00 | 10 - 25 | 7.5 - 25 | 0 - 7.5 | |
| | 04/13/92 | 13.23 | | 88.95 | 0.00 | | | | |
| | 05/15/92 | 15.09 | | 87.09 | 0.00 | | | | |
| | 06/15/92 | 16.95 | | 85.23 | 0.00 | | | | |
| | 07/16/92 | 17.96 | | 84.22 | 0.00 | | | | |
| | 08/18/92 | 17.76 | | 84.42 | 0.00 | | | | |
| | 09/18/92 | 18.75 | | 83.43 | 0.00 | | | | |
| | 12/08/92 | 14.66 | | 87.52 | 0.00 | | | | |
| | 03/10/93 | 12.80 | | 89.38 | 0.00 | | | | |
| | 06/04/93 | 13.25 | | 88.93 | 0.00 | | | | |
| | 10/14/93 | 16.20 | | 85.98 | 0.00 | | | | |
| | 04/11/94 | 14.85 | | 87.33 | 0.00 | | | | |
| | 10/19/94 | 15.04 | | 87.14 | 0.00 | | | | |
| | 04/11/95 | 9.77 | | 92.41 | 0.00 | | | | |
| | 03/06/96 | 10.12 | | 92.06 | 0.00 | | | | |
| | 10/14/96 | 12.45 | | 89.74 | 0.00 | | | | |
| | 04/10/97 | 10.79 | | 91.40 | 0.00 | | | | |
| | 10/28/97 | 13.32 | | 88.87 | 0.00 | | | | |
| | 04/07/98 | 8.02 | | 94.17 | 0.00 | | | | |
| | 10/07/98 | 11.64 | | 90.55 | 0.00 | | | | |
| | 04/07/99 | 8.79 | | 93.40 | 0.00 | | | | |
| | 10/19/99 | 12.05 | | 90.14 | 0.00 | | | | |
| | 04/26/00 | --- | | --- | --- | | | | Well inaccessible due to construction activities. |
| | 10/30/00 | 10.80 | 145.32 | 134.52 | 0.00 | | | | Top of casing elevations re-surveyed. |
| | 02/01/01 | 10.70 | | 134.62 | 0.00 | | | | |
| | 04/23/01 | 13.74 | | 131.58 | 0.00 | | | | |
| | 07/23/01 | 14.22 | | 131.10 | 0.00 | | | | |
| | 10/23/01 | 16.04 | | 129.28 | 0.00 | | | | |
| | 01/21/02 | 13.36 | | 134.61 | 0.00 | | | | |
| | 04/25/02 | 13.80 | | 134.17 | 0.00 | | | | |
| | 07/22/02 | 13.81 | | 134.16 | 0.00 | | | | |
| | 10/22/02 | 13.82 | | 134.15 | 0.00 | | | | |
| | 01/27/03 | 13.18 | 147.97 | 134.79 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|-------------|-----------------|--------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|-------|
| MW-2 | 04/21/03 | 12.34 | 147.97 | 135.63 | 0.00 | 10 - 25 | 7.5 - 25 | 0 - 7.5 | |
| | 07/21/03 | 13.01 | | 134.96 | 0.00 | | | | |
| | 01/20/04 | 11.81 | | 136.16 | 0.00 | | | | |
| | 07/19/04 | 12.84 | | 135.13 | 0.00 | | | | |
| | 01/18/05 | 11.14 | | 136.83 | 0.00 | | | | |
| | 07/12/05 | 11.02 | | 136.95 | 0.00 | | | | |
| | 02/01/06 | 10.22 | | 137.75 | 0.00 | | | | |
| MW-3 | 01/11/91 | --- | 101.94 | --- | --- | 18 - 33 | 17 - 33 | 0 - 17 | |
| | 02/08/91 | --- | | --- | --- | | | | |
| | 03/08/91 | 28.28 | | 73.66 | 0.00 | | | | |
| | 06/13/91 | --- | | --- | --- | | | | |
| | 07/09/91 | --- | | --- | --- | | | | |
| | 08/01/91 | --- | | --- | --- | | | | |
| | 08/29/91 | --- | | --- | --- | | | | |
| | 09/11/91 | --- | | --- | --- | | | | |
| | 10/08/91 | --- | | --- | --- | | | | |
| | 11/08/91 | --- | | --- | --- | | | | |
| | 12/11/91 | --- | | --- | --- | | | | |
| | 01/13/92 | --- | | --- | --- | | | | |
| | 02/11/92 | 18.82 | | 83.12 | 0.00 | | | | |
| | 03/11/92 | 11.76 | | 90.18 | 0.00 | | | | |
| | 04/13/92 | 12.25 | | 89.69 | 0.00 | | | | |
| | 05/15/92 | 15.35 | | 86.59 | 0.00 | | | | |
| | 06/15/92 | 17.61 | | 84.33 | 0.00 | | | | |
| | 07/16/92 | 19.86 | | 82.08 | 0.00 | | | | |
| | 08/18/92 | 19.66 | | 82.28 | 0.00 | | | | |
| | 10/18/92 | 26.00 | | 75.94 | 0.00 | | | | |
| | 12/08/92 | 17.24 | | 84.70 | 0.00 | | | | |
| | 03/10/93 | 14.60 | | 87.34 | 0.00 | | | | |
| | 06/04/93 | 13.95 | | 87.99 | 0.00 | | | | |
| | 10/14/93 | --- | | --- | --- | | | | |
| | 04/11/94 | 16.58 | | 85.36 | 0.00 | | | | |
| | 10/19/94 | 16.01 | | 85.93 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-3 | 04/11/95 | 11.12 | 101.94 | 90.82 | 0.00 | 18 - 33 | 17 - 33 | 0 - 17 | |
| | 03/06/96 | 11.72 | | 90.22 | 0.00 | | | | |
| | 10/14/96 | 13.94 | | 88.03 | 0.00 | | | | |
| | 04/10/97 | 12.08 | | 89.90 | 0.01 | | | | |
| | 10/29/97 | 16.02 | | 85.99 | 0.02 | | | | |
| | 04/07/98 | 9.97 | | 92.00 | 0.00 | | | | |
| | 10/07/98 | 12.66 | | 89.31 | 0.00 | | | | |
| | 04/07/99 | 9.70 | | 92.27 | 0.00 | | | | |
| | 10/19/99 | 13.15 | | 88.82 | 0.00 | | | | |
| | 04/26/00 | --- | | --- | --- | | | | Well inaccessible due to construction activities. |
| | 10/30/00 | --- | 145.10 | --- | --- | | | | Well plugged at seven feet, no water. |
| | 02/01/01 | 12.33 | | 132.77 | 0.00 | | | | |
| | 04/23/01 | --- | | --- | --- | | | | Well was inaccessible |
| | 07/23/01 | 14.98 | | 130.12 | 0.00 | | | | |
| | 10/23/01 | 17.00 | | 128.10 | 0.00 | | | | |
| | 01/21/02 | 13.67 | 147.75 | 134.08 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 14.50 | | 133.25 | 0.00 | | | | |
| | 07/22/02 | 14.96 | | 132.79 | 0.00 | | | | |
| | 10/22/02 | 15.22 | | 132.53 | 0.00 | | | | |
| | 01/27/03 | 14.21 | | 133.54 | 0.00 | | | | |
| | 04/21/03 | 13.47 | | 134.28 | 0.00 | | | | |
| | 07/21/03 | 14.43 | | 133.32 | 0.00 | | | | |
| | 01/20/04 | 12.00 | | 135.75 | 0.00 | | | | |
| | 07/19/04 | 14.03 | | 133.72 | 0.00 | | | | |
| | 01/18/05 | 11.11 | | 136.64 | 0.00 | | | | |
| | 07/12/05 | 11.68 | | 136.07 | 0.00 | | | | |
| | 02/01/06 | 10.23 | | 137.52 | 0.00 | | | | |
| MW-4 | 01/11/91 | --- | 101.47 | --- | --- | 10 - 25 | 7 - 25 | 0 - 7 | |
| | 02/08/91 | --- | | --- | --- | | | | |
| | 03/08/91 | --- | | --- | --- | | | | |
| | 06/13/91 | --- | | --- | --- | | | | |
| | 07/09/91 | --- | | --- | --- | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|---|
| MW-4 | 08/01/91 | --- | 101.47 | --- | --- | 10 - 25 | 7 - 25 | 0 - 7 | |
| | 08/29/91 | --- | | --- | --- | | | | |
| | 09/11/91 | --- | | --- | --- | | | | |
| | 10/08/91 | --- | | --- | --- | | | | |
| | 11/08/91 | --- | | --- | --- | | | | |
| | 12/11/91 | --- | | --- | --- | | | | |
| | 01/13/92 | 24.47 | | 77.00 | 0.00 | | | | |
| | 02/11/92 | 26.06 | | 75.41 | 0.00 | | | | |
| | 03/11/92 | 23.46 | | 78.01 | 0.00 | | | | |
| | 04/13/92 | 24.25 | | 77.22 | 0.00 | | | | |
| | 05/15/92 | --- | | --- | --- | | | | |
| | 06/15/92 | --- | | --- | --- | | | | |
| | 07/16/92 | --- | | --- | --- | | | | |
| | 08/18/92 | --- | | --- | --- | | | | |
| | 09/18/92 | --- | | --- | --- | | | | |
| | 12/08/92 | --- | | --- | --- | | | | |
| | 03/10/93 | --- | | --- | --- | | | | |
| | 06/04/93 | --- | | --- | --- | | | | |
| | 10/14/93 | --- | | --- | --- | | | | |
| | 04/11/94 | --- | | --- | --- | | | | |
| | 10/19/94 | --- | | --- | --- | | | | |
| | 04/11/95 | --- | | --- | --- | | | | |
| | 03/06/96 | 16.52 | 101.70 | 84.95 | 0.00 | | | | |
| | 10/14/96 | 20.39 | | 81.31 | 0.00 | | | | |
| | 04/10/97 | 16.02 | | 85.68 | 0.00 | | | | |
| | 10/29/97 | 21.61 | | 80.09 | 0.00 | | | | |
| | 04/07/98 | 11.30 | | 90.40 | 0.00 | | | | |
| | 10/07/98 | 15.53 | | 86.17 | 0.00 | | | | |
| | 04/07/99 | 11.95 | | 89.75 | 0.00 | | | | |
| | 10/19/99 | 15.15 | | 86.55 | 0.00 | | | | |
| | 04/26/00 | 10.38 | | 91.32 | 0.00 | | | | |
| | 06/01/00 | --- | | --- | --- | | | | |
| | 10/30/00 | 13.78 | 145.47 | 131.69 | 0.00 | | | | Top of casing elevations were surveyed. |
| | 02/01/01 | 13.41 | | 132.06 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/Grout Interval | Notes |
|-------------|-----------------|-------------|---------------|---------------|--------------|-----------------|--------------------|--------------------------|--|
| MW-4 | 04/23/01 | 19.27 | 145.47 | 126.20 | 0.00 | 10 - 25 | 7 - 25 | 0 - 7 | Top of casing elevations were surveyed for EDF compliance. |
| | 07/23/01 | 17.65 | | 127.82 | 0.00 | | | | |
| | 10/23/01 | 19.88 | | 125.59 | 0.00 | | | | |
| | 01/21/02 | 13.62 | | 134.50 | 0.00 | | | | |
| | 04/25/02 | 14.47 | | 133.65 | 0.00 | | | | |
| | 07/22/02 | 15.57 | | 132.55 | 0.00 | | | | |
| | 10/22/02 | 17.23 | | 130.89 | 0.00 | | | | |
| | 01/27/03 | 13.00 | | 135.12 | 0.00 | | | | |
| | 04/21/03 | 13.42 | | 134.70 | 0.00 | | | | |
| | 07/21/03 | 14.15 | | 133.97 | 0.00 | | | | |
| | 01/20/04 | 11.67 | | 136.45 | 0.00 | | | | |
| | 07/19/04 | 14.47 | | 133.65 | 0.00 | | | | |
| | 01/18/05 | 11.31 | | 136.81 | 0.00 | | | | |
| | 07/12/05 | 11.53 | | 136.59 | 0.00 | | | | |
| | 02/01/06 | 9.81 | | 138.31 | 0.00 | | | | |
| MW-5 | 06/13/91 | 25.84 | 101.37 | 75.53 | 0.00 | 34.5 - 44.5 | 32.5 - 44.5 | 0 - 32.5 | |
| | 07/09/91 | 25.98 | | 75.39 | 0.00 | | | | |
| | 08/01/91 | 23.22 | | 78.15 | 0.00 | | | | |
| | 08/29/91 | 22.79 | | 78.58 | 0.00 | | | | |
| | 09/11/91 | 22.58 | | 78.79 | 0.00 | | | | |
| | 10/08/91 | 27.46 | | 73.91 | 0.00 | | | | |
| | 11/08/91 | 24.36 | | 77.01 | 0.00 | | | | |
| | 12/11/91 | 23.35 | | 78.02 | 0.00 | | | | |
| | 01/13/92 | 23.96 | | 77.41 | 0.00 | | | | |
| | 02/11/92 | 23.67 | | 77.70 | 0.00 | | | | |
| | 03/11/92 | 22.01 | | 79.36 | 0.00 | | | | |
| | 04/13/92 | 21.50 | | 79.87 | 0.00 | | | | |
| | 05/15/92 | 18.96 | | 82.41 | 0.00 | | | | |
| | 06/15/92 | 18.72 | | 82.65 | 0.00 | | | | |
| | 07/16/92 | 19.88 | | 81.49 | 0.00 | | | | |
| | 08/18/92 | 19.38 | | 81.99 | 0.00 | | | | |
| | 09/18/92 | 19.60 | | 81.77 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|--------------------------|--|
| MW-5 | 12/08/92 | 20.04 | 101.37 | 81.33 | 0.00 | 34.5 - 44.5 | 32.5 - 44.5 | 0 - 32.5 | |
| | 03/10/93 | 16.60 | | 84.77 | 0.00 | | | | |
| | 06/04/93 | 15.96 | | 85.41 | 0.00 | | | | |
| | 10/14/93 | 18.68 | | 82.69 | 0.00 | | | | |
| | 04/11/94 | 14.46 | | 86.91 | 0.00 | | | | |
| | 10/19/94 | 15.56 | | 85.81 | 0.00 | | | | |
| | 04/11/95 | 9.52 | | 91.85 | 0.00 | | | | |
| | 03/06/96 | 10.60 | | 90.77 | 0.00 | | | | |
| | 10/14/96 | 11.81 | | 89.53 | 0.00 | | | | |
| | 04/09/97 | 10.08 | | 91.26 | 0.00 | | | | |
| | 10/29/97 | 15.05 | | 86.29 | 0.00 | | | | |
| | 04/07/98 | 8.01 | | 93.33 | 0.00 | | | | |
| | 10/07/98 | 9.82 | | 91.52 | 0.00 | | | | |
| | 04/07/99 | 9.12 | | 92.22 | 0.00 | | | | |
| | 10/19/99 | 12.96 | | 88.38 | 0.00 | | | | |
| | 04/26/00 | 9.28 | | 92.06 | 0.00 | | | | |
| | 10/30/00 | --- | 145.73 | --- | --- | | | | Well inaccessible due to area flooding |
| | 02/01/01 | 11.52 | | 134.21 | 0.00 | | | | |
| | 04/23/01 | 15.25 | | 130.48 | 0.00 | | | | |
| | 07/23/01 | 13.22 | | 132.51 | 0.00 | | | | |
| | 10/23/01 | 13.15 | | 132.58 | 0.00 | | | | |
| | 01/21/02 | 12.50 | 148.38 | 135.88 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 12.02 | | 136.36 | 0.00 | | | | |
| | 07/22/02 | 11.00 | | 137.38 | 0.00 | | | | |
| | 10/22/02 | 11.40 | | 136.98 | 0.00 | | | | |
| | 01/27/03 | 10.78 | | 137.60 | 0.00 | | | | |
| | 04/21/03 | 9.15 | | 139.23 | 0.00 | | | | |
| | 01/20/04 | 8.00 | | 140.38 | 0.00 | | | | |
| | 07/19/04 | 10.53 | | 137.85 | 0.00 | | | | |
| | 01/18/05 | 10.09 | | 138.29 | 0.00 | | | | |
| | 07/12/05 | 7.11 | | 141.27 | 0.00 | | | | |
| | 02/01/06 | 7.54 | | 140.84 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-----------------|-------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-5A | 10/14/96 | 11.80 | 101.37 | 89.57 | 0.00 | 50 - 60 | 49 - 60 | 0 - 49 | |
| | 04/10/97 | 10.16 | | 91.21 | 0.00 | | | | |
| | 10/29/97 | 16.80 | | 84.57 | 0.00 | | | | |
| | 04/07/98 | 9.64 | | 91.73 | 0.00 | | | | |
| | 10/07/98 | 10.09 | | 91.28 | 0.00 | | | | |
| | 04/07/99 | 7.55 | | 93.82 | 0.00 | | | | |
| | 10/19/99 | --- | | --- | --- | | | | Well casing was damaged. |
| | 04/26/00 | 7.58 | | 93.79 | 0.00 | | | | |
| | 10/30/00 | --- | 145.70 | --- | --- | | | | Well inaccessible due to area flooding |
| | 02/01/01 | 11.17 | | 134.53 | 0.00 | | | | |
| | 04/23/01 | 11.75 | | 133.95 | 0.00 | | | | |
| | 07/23/01 | 12.58 | | 133.12 | 0.00 | | | | |
| | 10/23/01 | 13.71 | | 131.99 | 0.00 | | | | |
| | 01/21/02 | 12.55 | 148.35 | 135.80 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 11.45 | | 136.90 | 0.00 | | | | |
| | 07/22/02 | 10.75 | | 137.60 | 0.00 | | | | |
| | 10/22/02 | 10.90 | | 137.45 | 0.00 | | | | |
| | 01/27/03 | 10.31 | | 138.04 | 0.00 | | | | |
| | 04/21/03 | 10.35 | | 138.00 | 0.00 | | | | |
| | 07/19/04 | 10.03 | | 138.32 | 0.00 | | | | |
| | 01/18/05 | 10.15 | | 138.20 | 0.00 | | | | |
| | 07/12/05 | 8.42 | | 139.93 | 0.00 | | | | |
| | 02/01/06 | 8.60 | | 139.75 | 0.00 | | | | |
| MW-7 | 06/13/91 | 34.93 | 100.86 | 65.93 | 0.00 | 51 - 60 | 49 - 60 | 0 - 49 | |
| | 07/09/91 | 35.05 | | 65.81 | 0.00 | | | | |
| | 08/01/91 | 35.76 | | 65.10 | 0.00 | | | | |
| | 08/29/91 | 37.28 | | 63.58 | 0.00 | | | | |
| | 09/11/91 | 36.71 | | 64.15 | 0.00 | | | | |
| | 10/08/91 | 36.59 | | 64.27 | 0.00 | | | | |
| | 11/08/91 | 36.31 | | 64.55 | 0.00 | | | | |
| | 12/11/91 | 36.55 | | 63.31 | 0.00 | | | | |
| | 01/13/92 | 37.03 | | 63.83 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-7 | 02/11/92 | 36.20 | 100.86 | 64.66 | 0.00 | 51 - 60 | 49 - 60 | 0 - 49 | |
| | 03/11/92 | 34.51 | | 66.35 | 0.00 | | | | |
| | 04/13/92 | 33.85 | | 67.01 | 0.00 | | | | |
| | 05/15/92 | 33.04 | | 67.82 | 0.00 | | | | |
| | 06/15/92 | 35.53 | | 65.33 | 0.00 | | | | |
| | 07/16/92 | 35.42 | | 65.44 | 0.00 | | | | |
| | 08/18/92 | 35.03 | | 65.83 | 0.00 | | | | |
| | 09/18/92 | 35.52 | | 65.34 | 0.00 | | | | |
| | 12/08/92 | 34.36 | | 66.50 | 0.00 | | | | |
| | 03/10/93 | 30.21 | | 70.65 | 0.00 | | | | |
| | 06/04/93 | 29.33 | | 71.53 | 0.00 | | | | |
| | 10/14/93 | 32.23 | | 68.63 | 0.00 | | | | |
| | 04/11/94 | 28.87 | | 71.99 | 0.00 | | | | |
| | 10/19/94 | 31.19 | | 69.67 | 0.00 | | | | |
| | 04/11/95 | 22.49 | | 78.37 | 0.00 | | | | |
| | 03/06/96 | 21.44 | | 79.42 | 0.00 | | | | |
| | 10/14/96 | --- | 101.03 | --- | --- | | | | Top of casing elevations re-surveyed. |
| | 04/09/97 | 20.67 | | 80.36 | 0.00 | | | | |
| | 10/29/97 | 24.71 | | 76.32 | 0.00 | | | | |
| | 04/07/98 | 16.96 | | 84.07 | 0.00 | | | | |
| | 10/07/98 | 19.46 | | 81.57 | 0.00 | | | | |
| | 04/07/99 | 15.27 | | 85.76 | 0.00 | | | | |
| | 10/19/99 | 18.79 | | 82.24 | 0.00 | | | | |
| | 04/26/00 | 13.45 | | 87.58 | 0.00 | | | | |
| | 10/30/00 | 17.01 | 144.72 | 127.71 | 0.00 | | | | Top of casing elevations re-surveyed. |
| | 02/01/01 | 16.17 | | 128.55 | 0.00 | | | | |
| | 04/23/01 | 18.12 | | 126.60 | 0.00 | | | | |
| | 07/23/01 | 19.53 | | 125.19 | 0.00 | | | | |
| | 10/23/01 | 22.00 | | 122.72 | 0.00 | | | | |
| MW-7 | 01/21/02 | 16.30 | 147.37 | 131.07 | 0.00 | | | | Top of casing elevations were resurveyed for EDF compliance. |
| | 04/25/02 | 16.27 | | 131.10 | 0.00 | | | | |
| | 07/22/02 | 17.81 | | 129.56 | 0.00 | | | | |
| | 10/22/02 | 18.90 | | 128.47 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|-------------|-----------------|--------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|-------|
| MW-7 | 01/27/03 | 15.20 | 147.37 | 132.17 | 0.00 | 51 - 60 | 49 - 60 | 0 - 49 | |
| | 04/21/03 | 14.92 | | 132.45 | 0.00 | | | | |
| | 07/21/03 | 16.27 | | 131.10 | 0.00 | | | | |
| | 01/20/04 | 14.37 | | 133.00 | 0.00 | | | | |
| | 07/19/04 | 17.90 | | 129.47 | 0.00 | | | | |
| | 01/18/05 | 12.07 | | 135.30 | 0.00 | | | | |
| | 07/12/05 | 13.00 | | 134.37 | 0.00 | | | | |
| | 02/01/06 | 10.15 | | 137.22 | 0.00 | | | | |
| | | | | | | | | | |
| MW-8 | 06/13/91 | 32.68 | 101.53 | 68.85 | 0.00 | 49 - 59 | 47.5 - 59 | 0 - 47.5 | |
| | 07/09/91 | 32.81 | | 68.72 | 0.00 | | | | |
| | 08/01/91 | 33.26 | | 68.27 | 0.00 | | | | |
| | 08/29/91 | 34.06 | | 67.47 | 0.00 | | | | |
| | 09/11/91 | 34.70 | | 66.83 | 0.00 | | | | |
| | 10/08/91 | 37.63 | | 63.90 | 0.00 | | | | |
| | 11/08/91 | 35.73 | | 65.80 | 0.00 | | | | |
| | 12/11/91 | 34.99 | | 66.54 | 0.00 | | | | |
| | 01/13/92 | 34.34 | | 67.19 | 0.00 | | | | |
| | 02/11/92 | 34.54 | | 66.99 | 0.00 | | | | |
| | 03/11/92 | 32.42 | | 69.11 | 0.00 | | | | |
| | 04/13/92 | 30.46 | | 71.07 | 0.00 | | | | |
| | 05/15/92 | 30.80 | | 70.73 | 0.00 | | | | |
| | 06/15/92 | 31.82 | | 69.71 | 0.00 | | | | |
| | 07/16/92 | 33.01 | | 68.52 | 0.00 | | | | |
| | 08/18/92 | 32.90 | | 68.63 | 0.00 | | | | |
| | 09/18/92 | 33.60 | | 67.93 | 0.00 | | | | |
| | 12/08/92 | 33.07 | | 68.46 | 0.00 | | | | |
| | 03/10/93 | 26.87 | | 74.66 | 0.00 | | | | |
| | 06/04/93 | 25.39 | | 76.14 | 0.00 | | | | |
| | 10/14/93 | 29.90 | | 71.63 | 0.00 | | | | |
| | 04/11/94 | 26.70 | | 74.83 | 0.00 | | | | |
| | 10/19/94 | 15.56 | | 85.97 | 0.00 | | | | |
| | 04/11/95 | 19.87 | | 81.66 | 0.00 | | | | |
| | 03/06/96 | 19.03 | | 82.50 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-----------------|--------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-8 | 10/14/96 | 22.90 | 101.42 | 78.52 | 0.00 | 49 - 59 | 47.5 - 59 | 0 - 47.5 | Top of casing elevation re-surveyed. |
| | 04/10/97 | 19.06 | | 82.36 | 0.00 | | | | |
| | 10/29/97 | 23.91 | | 77.51 | 0.00 | | | | |
| | 04/07/98 | 15.15 | | 86.27 | 0.00 | | | | |
| | 10/07/98 | 19.02 | | 82.40 | 0.00 | | | | |
| | 04/07/99 | 14.39 | | 87.03 | 0.00 | | | | |
| | 10/19/99 | 19.40 | | 82.02 | 0.00 | | | | |
| | 04/26/00 | 13.78 | | 87.64 | 0.00 | | | | |
| | 10/30/00 | 17.90 | 144.85 | 126.95 | 0.00 | | | | Top of casing elevation re-surveyed. |
| | 02/01/01 | 16.78 | | 128.07 | 0.00 | | | | |
| | 04/23/01 | 17.25 | | 127.60 | 0.00 | | | | |
| | 07/23/01 | 19.18 | | 125.67 | 0.00 | | | | |
| | 10/23/01 | 21.80 | | 123.05 | 0.00 | | | | |
| MW-8 | 01/21/02 | 14.21 | 147.50 | 133.29 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 15.82 | | 131.68 | 0.00 | | | | |
| | 07/22/02 | 15.50 | | 132.00 | 0.00 | | | | |
| | 10/22/02 | 18.70 | | 128.80 | 0.00 | | | | |
| | 01/27/03 | 14.85 | | 132.65 | 0.00 | | | | |
| | 04/21/03 | 14.80 | | 132.70 | 0.00 | | | | |
| | 07/21/03 | 16.30 | | 131.20 | 0.00 | | | | |
| | 01/20/04 | 14.31 | | 133.19 | 0.00 | | | | |
| | 07/19/04 | 15.65 | | 131.85 | 0.00 | | | | |
| | 01/18/05 | 12.65 | | 134.85 | 0.00 | | | | |
| | 02/01/06 | 10.42 | | 137.08 | 0.00 | | | | |
| MW-9 | 10/14/96 | 16.40 | 100.29 | 83.89 | 0.00 | 8 - 26 | 7 - 26 | 0 - 7 | |
| | 04/10/97 | 12.98 | | 87.31 | 0.00 | | | | |
| | 10/29/97 | 16.06 | | 84.23 | 0.00 | | | | |
| | 04/07/98 | 10.31 | | 89.98 | 0.00 | | | | |
| | 10/07/98 | 14.48 | | 85.81 | 0.00 | | | | |
| | 04/07/99 | 10.90 | | 89.39 | 0.00 | | | | |
| | 10/19/99 | 14.65 | | 82.08 | 0.00 | | | | |
| | 04/26/00 | 11.51 | | 88.78 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-9 | 10/30/00 | 14.42 | 144.66 | 130.24 | 0.00 | 8 - 26 | 7 - 26 | 0 - 7 | Top of casing elevation surveyed. |
| | 02/01/01 | 14.12 | | 130.54 | 0.00 | | | | |
| | 04/23/01 | 15.54 | | 129.12 | 0.00 | | | | |
| | 07/23/01 | 16.45 | | 128.21 | 0.00 | | | | |
| | 10/23/01 | 18.80 | | 125.86 | 0.00 | | | | |
| | 01/21/02 | 15.52 | | 131.79 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 14.64 | | 132.67 | 0.00 | | | | |
| | 07/22/02 | 17.55 | | 129.76 | 0.00 | | | | |
| | 10/22/02 | 16.00 | | 131.31 | 0.00 | | | | |
| | 01/27/03 | 13.64 | | 133.67 | 0.00 | | | | |
| | 04/21/03 | 13.75 | | 133.56 | 0.00 | | | | |
| | 07/21/03 | 14.60 | | 132.71 | 0.00 | | | | |
| | 01/20/04 | 13.12 | | 134.19 | 0.00 | | | | |
| | 07/19/04 | 14.36 | | 132.95 | 0.00 | | | | |
| | 01/18/05 | 11.76 | | 135.55 | 0.00 | | | | |
| | 02/01/06 | 8.65 | | 138.66 | 0.00 | | | | |
| MW-10 | 04/10/99 | 12.04 | 102.04 | 0.00 | 0.00 | 5 - 20 | 4.5 - 20 | 0 - 4.5 | |
| | 10/19/99 | 13.33 | | 0.00 | 0.00 | | | | |
| | 04/26/00 | 9.55 | | --- | 0.00 | | | | |
| | 10/30/00 | 10.25 | 145.40 | 135.15 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 11.37 | | 134.03 | 0.00 | | | | |
| | 04/23/01 | 13.92 | | 131.48 | 0.00 | | | | |
| | 07/23/01 | 14.75 | | 130.65 | 0.00 | | | | |
| | 10/23/01 | 17.21 | | 128.19 | 0.00 | | | | |
| | 01/21/02 | 13.00 | 148.05 | 135.05 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 14.05 | | 134.00 | 0.00 | | | | |
| | 07/22/02 | 14.30 | | 133.75 | 0.00 | | | | |
| | 10/22/02 | 14.70 | | 133.35 | 0.00 | | | | |
| | 01/27/03 | 12.62 | | 135.43 | 0.00 | | | | |
| | 04/21/03 | 12.81 | | 135.24 | 0.00 | | | | |
| | 07/21/03 | 13.75 | | 134.30 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-----------------|--------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-10 | 01/20/04 | 11.71 | 148.05 | 136.34 | 0.00 | 5 - 20 | 4.5 - 20 | 0 - 4.5 | |
| | 07/19/04 | 13.36 | | 134.69 | 0.00 | | | | |
| | 01/18/05 | 10.05 | | 138.00 | 0.00 | | | | |
| | 07/12/05 | 11.60 | | 136.45 | 0.00 | | | | |
| | 02/01/06 | 10.04 | | 138.01 | 0.00 | | | | |
| MW-11 | 05/08/00 | 18.21 | 101.74 | 83.53 | 0.00 | 15-35 | 13-35 | 0-13 | |
| | 06/07/00 | 19.05 | | 82.69 | 0.00 | | | | |
| | 10/30/00 | 23.70 | | 122.67 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 21.73 | | 124.64 | 0.00 | | | | |
| | 04/23/01 | 20.21 | | 126.16 | 0.00 | | | | |
| | 07/23/01 | 22.69 | | 123.68 | 0.00 | | | | |
| | 10/23/01 | 25.65 | | 120.72 | 0.00 | | | | |
| | 01/21/02 | 17.95 | 149.02 | 131.07 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 17.35 | | 131.67 | 0.00 | | | | |
| | 07/22/02 | 20.10 | | 128.92 | 0.00 | | | | |
| | 10/22/02 | 21.91 | | 127.11 | 0.00 | | | | |
| | 01/27/03 | 17.32 | | 131.70 | 0.00 | | | | |
| | 04/21/03 | 16.36 | | 132.66 | 0.00 | | | | |
| | 07/21/03 | 18.08 | | 130.94 | 0.00 | | | | |
| | 01/20/04 | 16.27 | | 132.75 | 0.00 | | | | |
| | 07/19/04 | --- | | --- | --- | | | | |
| | 02/01/06 | 12.83 | | 136.19 | 0.00 | | | | |
| MW-12 | 05/08/00 | 20.75 | 101.15 | 80.40 | 0.00 | 10 - 30 | 8 - 30 | 0 - 8 | |
| | 06/07/00 | 21.25 | | 79.90 | 0.00 | | | | |
| | 10/30/00 | 25.43 | | 120.95 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 24.27 | | 122.11 | 0.00 | | | | |
| | 04/23/01 | 22.00 | 146.38 | 124.38 | 0.00 | | | | |
| | 07/23/01 | 24.11 | | 122.27 | 0.00 | | | | |
| | 10/23/01 | 26.38 | | 120.00 | 0.00 | | | | |
| | 01/21/02 | 19.70 | | 129.33 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-----------------|--------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|-------------------------------------|
| MW-12 | 04/25/02 | 18.91 | 149.03 | 130.12 | 0.00 | 10 - 30 | 8 - 30 | 0 - 8 | |
| | 07/22/02 | 21.21 | | 127.82 | 0.00 | | | | |
| | 10/22/02 | 23.98 | | 125.05 | 0.00 | | | | |
| | 01/27/03 | 18.75 | | 130.28 | 0.00 | | | | |
| | 04/21/03 | 17.81 | | 131.22 | 0.00 | | | | |
| | 07/21/03 | 19.71 | | 129.32 | 0.00 | | | | |
| | 01/20/04 | 18.43 | | 130.60 | 0.00 | | | | |
| | 07/19/04 | 18.39 | | 130.64 | 0.00 | | | | |
| | 01/18/05 | 16.94 | | 132.09 | 0.00 | | | | |
| | 02/01/06 | 13.53 | | 135.50 | 0.00 | | | | |
| MW-13 | 05/08/00 | 22.60 | 101.81 | 79.21 | 0.00 | 10 - 30 | 8 - 30 | 0 - 8 | |
| | 06/07/00 | 23.03 | | 78.78 | 0.00 | | | | |
| | 10/30/00 | 27.14 | | 120.18 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 26.11 | | 121.21 | 0.00 | | | | |
| | 04/23/01 | 23.56 | 147.32 | 123.76 | 0.00 | | | | |
| | 07/23/01 | 25.76 | | 121.56 | 0.00 | | | | |
| | 10/23/01 | 27.60 | | 119.72 | 0.00 | | | | Monitoring well has been abandoned. |
| | | | | | | | | | |
| MW-14 | 05/08/00 | 20.37 | 99.77 | 79.40 | 0.00 | 10-30 | 8-30 | 0-8 | |
| | 06/07/00 | 20.72 | | 79.05 | 0.00 | | | | |
| | 10/30/00 | 24.61 | | 120.35 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 23.57 | 144.96 | 121.39 | 0.00 | | | | |
| | 04/23/01 | 21.13 | | 123.83 | 0.00 | | | | |
| | 07/23/01 | 23.18 | | 121.78 | 0.00 | | | | |
| | 10/23/01 | 25.50 | | 119.46 | 0.00 | | | | Monitoring well has been abandoned. |
| MW-15 | 05/08/00 | 13.51 | --- | --- | 0.00 | 8-25 | 7-25 | 0-7 | |
| | 06/07/00 | 13.73 | 101.06 | 87.33 | 0.00 | | | | |
| | 10/30/00 | 14.64 | 145.44 | 130.80 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 15.04 | | 130.40 | 0.00 | | | | |
| | 04/23/01 | 16.72 | | 128.72 | 0.00 | | | | |
| | 07/23/01 | 19.62 | | 125.82 | 0.00 | | | | |
| | 10/23/01 | 22.17 | | 123.27 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-----------------|-------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-15 | 01/21/02 | 14.80 | 148.09 | 133.29 | 0.00 | 8-25 | 7-25 | 0-7 | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 14.88 | | 133.21 | 0.00 | | | | |
| | 07/22/02 | 16.47 | | 131.62 | 0.00 | | | | |
| | 10/22/02 | 18.84 | | 129.25 | 0.00 | | | | |
| | 01/27/03 | 13.88 | | 134.21 | 0.00 | | | | |
| | 04/21/03 | 13.31 | | 134.78 | 0.00 | | | | |
| | 07/21/03 | 14.11 | | 133.98 | 0.00 | | | | |
| | 01/20/04 | 13.15 | | 134.94 | 0.00 | | | | |
| | 07/19/04 | 13.12 | | 134.97 | 0.00 | | | | |
| | 01/18/05 | 11.58 | | 136.51 | 0.00 | | | | |
| | 07/12/05 | 11.23 | | 136.86 | 0.00 | | | | |
| | 02/01/06 | 9.61 | | 138.48 | 0.00 | | | | |
| MW-16 | 05/08/00 | 14.85 | --- | --- | 0.00 | 8-25 | 7-25 | 0-7 | |
| | 06/07/00 | 15.53 | 102.58 | 87.05 | 0.00 | | | | |
| | 10/30/00 | 18.77 | 147.68 | 128.91 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 18.17 | | 129.51 | 0.00 | | | | |
| | 04/23/01 | 14.58 | | 133.10 | 0.00 | | | | |
| | 07/23/01 | 24.26 | | 123.42 | 0.00 | | | | |
| | 10/23/01 | 23.40 | | 124.28 | 0.00 | | | | |
| | 01/21/02 | 14.11 | 150.33 | 136.22 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 13.66 | | 136.67 | 0.00 | | | | |
| | 07/22/02 | 17.60 | | 132.73 | 0.00 | | | | |
| | 10/22/02 | 18.75 | | 131.58 | 0.00 | | | | |
| | 01/27/03 | 12.97 | | 137.36 | 0.00 | | | | |
| | 04/21/03 | 13.98 | | 136.35 | 0.00 | | | | |
| | 07/21/03 | 14.66 | | 135.67 | 0.00 | | | | |
| | 01/20/04 | 12.38 | | 137.95 | 0.00 | | | | |
| | 07/19/04 | 13.41 | | 136.92 | 0.00 | | | | |
| | 01/18/05 | 11.38 | | 138.95 | 0.00 | | | | |
| | 07/12/05 | 11.38 | | 138.95 | 0.00 | | | | |
| | 02/01/06 | 9.92 | | 140.41 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|--------------------------|--|
| <hr/> | | | | | | | | | |
| MW-17 | 05/08/00 | 7.80 | 103.65 | 95.85 | 0.00 | 8 - 25 | 7 - 25 | 0 - 7 | |
| | 06/07/00 | 8.51 | | 95.14 | 0.00 | | | | |
| | 10/30/00 | 17.00 | | 131.28 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 7.86 | | 140.42 | 0.00 | | | | |
| | 04/23/01 | 8.38 | | 139.90 | 0.00 | | | | |
| | 08/22/01 | 11.80 | | 136.48 | 0.00 | | | | |
| | 10/23/01 | 13.15 | | 135.13 | 0.00 | | | | |
| | 01/21/02 | 7.10 | 150.93 | 143.83 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 6.70 | | 144.23 | 0.00 | | | | |
| | 07/22/02 | --- | | --- | --- | | | | Well was inaccessible |
| | 10/22/02 | 11.31 | | 139.62 | 0.00 | | | | |
| | 01/27/03 | 9.55 | | 141.38 | 0.00 | | | | |
| | 04/21/03 | — | | — | --- | | | | Well was inaccessible |
| | 01/20/04 | — | | — | --- | | | | Well was inaccessible |
| | 07/19/04 | --- | | --- | --- | | | | |
| | 01/17/05 | --- | | --- | --- | | | | |
| | 07/12/05 | 7.07 | | 143.86 | 0.00 | | | | |
| | 02/01/06 | -- | | -- | -- | | | | Surface flooding. GW elevation not measured. |
| <hr/> | | | | | | | | | |
| MW-18 | 05/08/00 | 11.20 | 99.67 | 88.47 | 0.00 | 8 - 25 | 7 - 25 | 0 - 7 | |
| | 06/07/00 | 11.56 | | 88.11 | 0.00 | | | | |
| | 10/30/00 | 14.79 | | 129.35 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 13.91 | | 130.23 | 0.00 | | | | |
| | 04/23/01 | 13.30 | | 130.84 | 0.00 | | | | |
| | 07/23/01 | 14.71 | | 129.43 | 0.00 | | | | |
| | 10/23/01 | 18.15 | | 125.99 | 0.00 | | | | |
| | 01/21/02 | 12.15 | 144.14 | 134.64 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 12.29 | | 134.50 | 0.00 | | | | |
| | 07/22/02 | 13.76 | | 133.03 | 0.00 | | | | |
| | 10/22/02 | 14.76 | | 132.03 | 0.00 | | | | |
| | 01/27/03 | 11.41 | | 135.38 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-----------------|-------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-18 | 04/21/03 | 11.58 | 146.79 | 135.21 | 0.00 | 8 - 25 | 7 - 25 | 0 - 7 | |
| | 07/21/03 | 12.71 | | 134.08 | 0.00 | | | | |
| | 01/20/04 | 11.19 | | 135.60 | 0.00 | | | | |
| | 07/19/04 | 12.67 | | 134.12 | 0.00 | | | | |
| | 01/17/05 | 10.91 | | 135.88 | 0.00 | | | | |
| | 02/01/06 | 8.09 | | 138.70 | 0.00 | | | | |
| MW-19 | 05/08/00 | 8.95 | 100.42 | 91.47 | 0.00 | 8 - 25 | 7 - 25 | 0 - 7 | |
| | 06/07/00 | 9.62 | | 90.80 | 0.00 | | | | |
| | 10/30/00 | 12.66 | | 132.52 | 0.00 | | | | Top of casing elevation surveyed. |
| | 02/01/01 | 12.65 | | 132.53 | 0.00 | | | | |
| | 04/23/01 | 10.55 | | 134.63 | 0.00 | | | | |
| | 07/23/01 | 12.27 | | 132.91 | 0.00 | | | | |
| | 10/23/01 | 13.92 | | 131.26 | 0.00 | | | | |
| | 01/21/02 | 9.44 | 147.83 | 138.39 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 9.61 | | 138.22 | 0.00 | | | | |
| | 07/22/02 | 10.65 | | 137.18 | 0.00 | | | | |
| | 10/22/02 | 11.66 | | 136.17 | 0.00 | | | | |
| | 01/27/03 | 9.60 | | 138.23 | 0.00 | | | | |
| | 04/21/03 | 9.16 | | 138.67 | 0.00 | | | | |
| | 07/21/03 | 9.55 | | 138.28 | 0.00 | | | | |
| | 01/20/04 | 9.20 | | 138.63 | 0.00 | | | | |
| | 07/19/04 | 10.68 | | 137.15 | 0.00 | | | | |
| | 01/17/05 | 9.33 | | 138.50 | 0.00 | | | | |
| | 02/01/06 | 7.02 | | 140.81 | 0.00 | | | | |
| MW-20 | 06/07/00 | 9.47 | 103.13 | 93.66 | 0.00 | 10-25 | 8-25 | 6-8 | |
| | 10/30/00 | 11.81 | | 135.67 | 0.00 | | | | Top of casing elevation surveyed. |
| | 2/15/0112 | 11.42 | | 136.06 | 0.00 | | | | |
| | 4/23/0113 | --- | | --- | --- | | | | |
| | 07/23/01 | 12.37 | | 135.11 | 0.00 | | | | |
| | 10/23/01 | 13.45 | | 134.03 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|--------------|-----------------|--------------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| MW-20 | 01/21/02 | 9.68 | 150.13 | 140.45 | 0.00 | 10-25 | 8-25 | 6-8 | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | — | | — | --- | | | | Well was inaccessible |
| | 07/22/02 | 11.41 | | 138.72 | 0.00 | | | | |
| | 10/22/02 | 11.98 | | 138.15 | 0.00 | | | | |
| | 01/27/03 | 10.78 | | 139.35 | 0.00 | | | | |
| | 04/21/03 | 9.87 | | 140.26 | 0.00 | | | | |
| | 07/21/03 | 12.16 | | 137.97 | 0.00 | | | | |
| | 01/20/04 | 8.94 | | 141.19 | 0.00 | | | | |
| | 07/19/04 | 10.78 | | 139.35 | 0.00 | | | | |
| | 01/17/05 | 8.98 | | 141.15 | 0.00 | | | | |
| | 02/01/06 | 12.30 | | 137.83 | 0.00 | | | | |
| | | | | | | | | | |
| V-1 | 06/13/91 | 21.89 | 102.53 | 80.64 | 0.00 | 15.5 - 25.5 | 13.5 - 25.5 | 0 - 13.5 | |
| | 07/09/91 | 21.91 | | 80.62 | 0.00 | | | | |
| | 08/01/91 | 21.34 | | 81.19 | 0.00 | | | | |
| | 08/29/91 | 21.10 | | 81.43 | 0.00 | | | | |
| | 09/11/91 | 21.25 | | 81.28 | 0.00 | | | | |
| | 10/08/91 | 22.88 | | 79.65 | 0.00 | | | | |
| | 11/08/91 | 22.15 | | 80.38 | 0.00 | | | | |
| | 12/11/91 | --- | | --- | --- | | | | |
| | 01/13/92 | 21.28 | | 81.25 | 0.00 | | | | |
| | 02/11/92 | 18.75 | | 83.78 | 0.00 | | | | |
| | 03/11/92 | 13.54 | 102.53 | 88.99 | 0.00 | | | | |
| | 04/13/92 | 14.52 | | 88.01 | 0.00 | | | | |
| | 05/15/92 | 15.18 | | 87.35 | 0.00 | | | | |
| | 06/15/92 | 16.29 | | 86.24 | 0.00 | | | | |
| | 07/16/92 | 17.22 | | 85.31 | 0.00 | | | | |
| | 08/18/92 | 17.08 | | 85.45 | 0.00 | | | | |
| | 09/18/92 | 18.25 | | 84.28 | 0.00 | | | | |
| | 12/08/92 | 17.80 | | 84.73 | 0.00 | | | | |
| | 03/10/93 | 15.59 | | 86.94 | 0.00 | | | | |
| | 06/04/93 | 14.97 | | 87.56 | 0.00 | | | | |
| | 10/14/93 | 14.66 | | 87.87 | 0.00 | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--|
| V-1 | 04/11/94 | 14.00 | 102.53 | 88.53 | 0.00 | 15.5 - 25.5 | 13.5 - 25.5 | 0 - 13.5 | |
| | 10/19/94 | 13.92 | | 88.61 | 0.00 | | | | |
| | 04/11/95 | 9.28 | | 93.25 | 0.00 | | | | |
| | 03/06/96 | 9.72 | | 92.81 | 0.00 | | | | |
| | 10/14/96 | 11.91 | | 90.60 | 0.00 | | | | Top of casing elevations were surveyed. |
| | 04/09/97 | 10.48 | | 92.03 | 0.00 | | | | |
| | 10/29/97 | 13.96 | | 88.57 | 0.02 | | | | |
| | 04/07/98 | 8.01 | | 94.50 | 0.00 | | | | |
| | 10/07/98 | 11.10 | | 91.41 | 0.00 | | | | |
| | 04/07/99 | 8.15 | | 94.36 | 0.00 | | | | |
| | 10/19/99 | 11.49 | | 91.02 | 0.00 | | | | |
| | 04/26/00 | 8.64 | | 93.87 | 0.00 | | | | |
| | 10/30/00 | 11.85 | 146.85 | 135.00 | 0.00 | | | | Top of casing elevations were surveyed. |
| | 02/26/01 | 12.55 | | 134.30 | 0.00 | | | | |
| | 04/23/01 | 13.14 | | 133.71 | 0.00 | | | | |
| | 07/23/01 | 13.73 | | 133.12 | 0.00 | | | | |
| | 10/23/01 | 14.85 | | 132.00 | 0.00 | | | | |
| | 01/21/02 | 11.70 | 149.50 | 137.80 | 0.00 | | | | Top of casing elevations were surveyed for EDF compliance. |
| | 04/25/02 | 11.65 | | 137.85 | 0.00 | | | | |
| | 07/22/02 | 12.52 | | 136.98 | 0.00 | | | | |
| | 10/22/02 | 12.90 | | 136.60 | 0.00 | | | | |
| | 01/27/03 | 11.43 | | 138.07 | 0.00 | | | | |
| | 04/21/03 | 11.44 | | 138.06 | 0.00 | | | | |
| | 07/21/03 | 12.08 | | 137.42 | 0.00 | | | | |
| | 01/20/04 | 10.54 | | 138.96 | 0.00 | | | | |
| | 07/19/04 | 11.92 | | 137.58 | 0.00 | | | | |
| | 01/17/05 | 10.21 | | 139.29 | 0.00 | | | | |
| | 07/12/05 | 9.96 | | 139.54 | 0.00 | | | | |
| V-2 | 06/13/91 | --- | 101.13 | --- | --- | 8 - 23 | 7 - 23 | 0 - 7 | |
| | 07/09/91 | --- | | --- | --- | | | | |
| | 08/01/91 | --- | | --- | --- | | | | |
| | 08/29/91 | --- | | --- | --- | | | | |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|--------------------------|---|
| V-2 | 09/11/91 | --- | 101.13 | --- | --- | 8 - 23 | 7 - 23 | 0 - 7 | |
| | 10/08/91 | --- | | --- | --- | | | | |
| | 11/08/91 | --- | | --- | --- | | | | |
| | 12/11/91 | --- | | --- | --- | | | | |
| | 01/13/92 | 18.39 | | 82.74 | 0.00 | | | | |
| | 02/11/92 | 21.16 | | 79.97 | 0.00 | | | | |
| | 03/11/92 | 16.86 | | 84.27 | 0.00 | | | | |
| | 04/13/92 | 17.03 | | 84.10 | 0.00 | | | | |
| | 05/15/92 | 17.78 | | 83.35 | 0.00 | | | | |
| | 06/15/92 | 21.44 | | 79.69 | 0.00 | | | | |
| | 07/16/92 | --- | | --- | --- | | | | |
| | 08/18/92 | --- | | --- | --- | | | | |
| | 09/18/92 | --- | | --- | --- | | | | |
| | 12/08/92 | 19.41 | | 81.72 | 0.00 | | | | |
| | 03/10/93 | 13.62 | | 87.51 | 0.00 | | | | |
| | 06/04/93 | 12.98 | | 88.15 | 0.00 | | | | |
| | 10/14/93 | --- | | --- | --- | | | | |
| | 04/11/94 | 20.11 | | 81.02 | 0.00 | | | | |
| | 10/19/94 | --- | | --- | --- | | | | |
| | 04/11/95 | 12.14 | | 88.99 | 0.00 | | | | |
| | 03/06/96 | 13.01 | | 88.12 | 0.00 | | | | |
| | 10/14/96 | 16.04 | 100.82 | 84.78 | 0.00 | | | | |
| | 04/09/97 | 13.46 | | 87.36 | 0.00 | | | | |
| | 10/29/97 | 17.24 | | 83.58 | 0.00 | | | | |
| | 04/07/98 | 8.01 | | 94.50 | 0.00 | | | | |
| | 10/07/98 | 13.68 | | 87.14 | 0.00 | | | | |
| | 04/07/99 | 10.56 | | 90.26 | 0.00 | | | | |
| | 10/19/99 | 13.96 | | 86.86 | 0.00 | | | | |
| | 04/26/00 | 9.31 | | 91.51 | 0.00 | | | | |
| | 10/30/00 | 11.75 | 143.85 | 132.10 | 0.00 | | | | Top of casing elevations were surveyed. |
| | 02/26/01 | 10.36 | | 133.49 | 0.00 | | | | |
| | 04/23/01 | 15.10 | | 128.75 | 0.00 | | | | |
| | 08/22/01 | 15.48 | | 128.37 | 0.00 | | | | Well has been switched to a SVE (soil vapor extraction) well. |

Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

| Well ID | Sample Date | DTW (Ft) | TOC (Ft, msl) | GWE (Ft, msl) | Product (ft) | Screen Interval | Sand Pack Interval | Bentonite/ Grout Interval | Notes |
|---------|-------------|----------|---------------|---------------|--------------|-----------------|--------------------|---------------------------|--------------------------|
| <hr/> | | | | | | | | | |
| DW-1 | 06/13/91 | 37.82 | 102.64 | 64.82 | 0.00 | 140 - 180 | 61 - 180 | 0 - 61 | Well has been abandoned. |
| | 07/09/91 | 37.82 | | 64.82 | 0.00 | | | | |
| | 08/01/91 | 92.26 | | 10.38 | 0.00 | | | | |
| | 08/29/91 | 50.13 | | 52.51 | 0.00 | | | | |
| | 09/11/91 | 39.72 | | 62.92 | 0.00 | | | | |
| | 10/08/91 | 39.31 | | 63.33 | 0.00 | | | | |
| | 11/09/91 | 38.90 | | 63.74 | 0.00 | | | | |
| | 12/11/91 | 39.96 | | 62.68 | 0.00 | | | | |
| | 12/08/92 | 37.75 | | 64.89 | 0.00 | | | | |
| | 03/10/93 | 32.60 | | 70.04 | 0.00 | | | | |
| | 06/04/93 | 32.35 | | 70.29 | 0.00 | | | | |
| | 10/14/93 | --- | | --- | --- | | | | |
| <hr/> | | | | | | | | | |
| DW-2 | 03/09/74 | --- | --- | --- | --- | 94 - 134 | unknown | 0 - 20 | Well has been abandoned. |
| | 10/17/95 | --- | | --- | --- | | | | |
| | 10/21/96 | --- | | --- | --- | | | | |
| | 04/10/97 | --- | | --- | --- | | | | |
| | 10/30/97 | --- | | --- | --- | | | | |
| | 04/08/98 | --- | | --- | --- | | | | |
| | 10/07/98 | --- | | --- | --- | | | | |
| | 04/07/99 | --- | | --- | --- | | | | |
| | 08/30/99 | 23.23 | | --- | 0.48 | | | | |

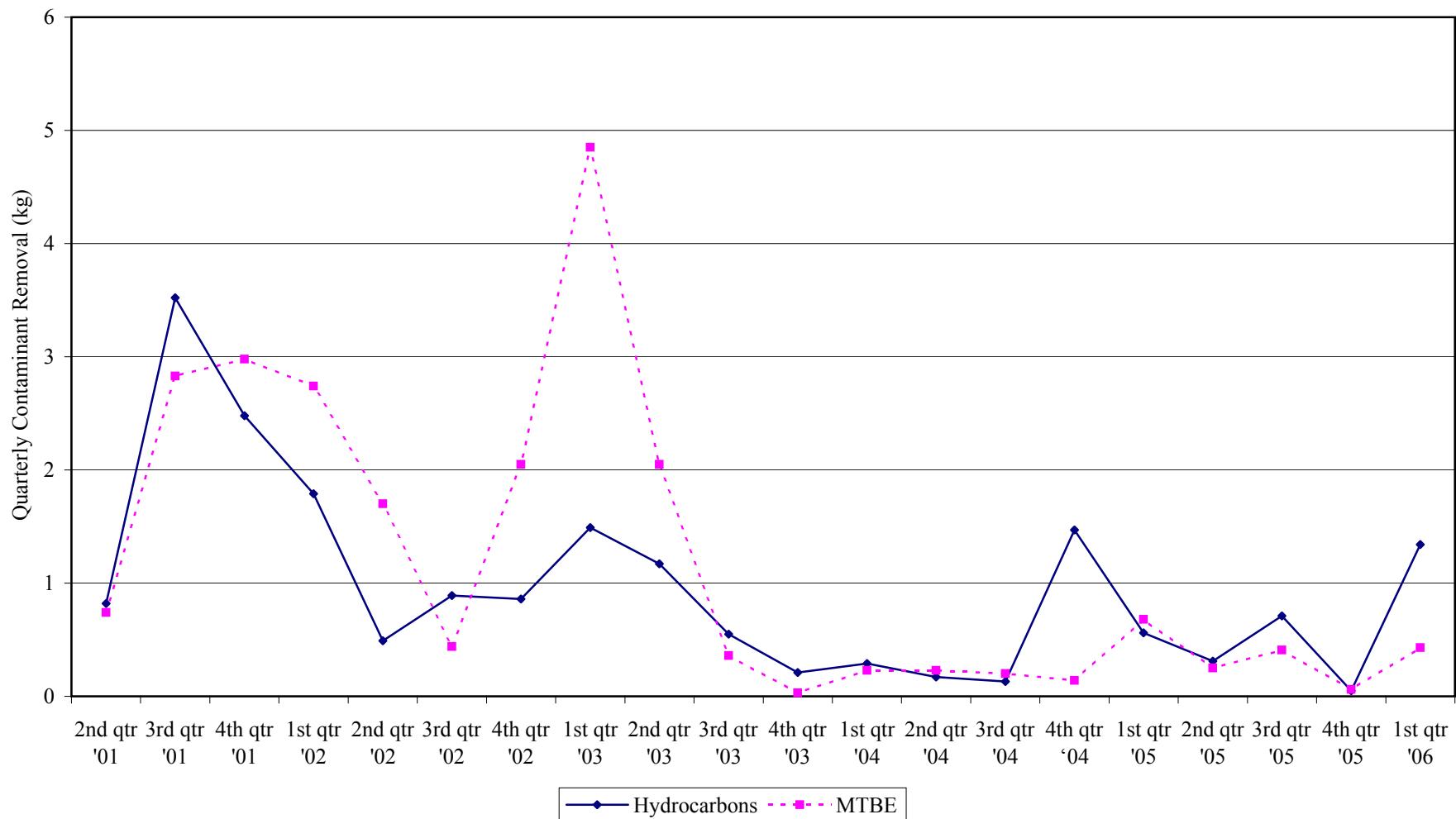
Table 7. Water Level Data/Well Construction Details - Redwood Oil Bulk Plant, 455 Yolanda Ave. Santa Rosa, CA

EXPLANATION:

DTW = Depth to water
ft =feet
msl = mean sea level
TOC = Top of casing elevation
GWE = Ground water elevation
— = **Not applicable**

Table 8. Hydrocarbon and MTBE Removal - Redwood Oil Company Bulk Plant, 455 Yolanda Ave., Santa Rosa, CA

| Quarter | Gallons Pumped | Influent Hydrocarbon Concentration (TPH[D] + TPH[G]) (ug/L) | Hydrocarbon Removal (kg) | Influent MTBE | MTBE Removal (kg) | notes |
|--------------------|----------------|---|--------------------------|---------------|-------------------|---|
| 2nd qtr '01 | 46,786 | 4,605 | 0.82 | 4,200 | 0.74 | |
| 3rd qtr '01 | 158,860 | 5,850 | 3.52 | 4,700 | 2.83 | |
| 4th qtr '01 | 192,067 | 3,100 | 2.48 | 4,100 | 2.98 | |
| 1st qtr '02 | 369,942 | 1,277 | 1.79 | 1,955 | 2.74 | |
| 2nd qtr '02 | 390,485 | 1,242 | 0.49 | 1,145 | 1.7 | |
| 3rd qtr '02 | 208,672 | 1,130 | 0.89 | 555 | 0.44 | |
| 4th qtr '02 | 255,724 | 887 | 0.86 | 2,240 | 2.05 | |
| 1st qtr '03 | 413,190 | 950 | 1.49 | 3,100 | 4.85 | |
| 2nd qtr '03 | 471,556 | 655 | 1.17 | 1,150 | 2.05 | |
| 3rd qtr '03 | 295,358 | 495 | 0.55 | 320 | 0.36 | |
| 4th qtr '03 | 68,947 | 790 | 0.21 | 110 | 0.03 | |
| 1st qtr '04 | 157,526 | 490 | 0.29 | 390 | 0.23 | |
| 2nd qtr '04 | 80,599 | 540 | 0.17 | 760 | 0.23 | |
| 3rd qtr '04 | 86,505 | 410 | 0.13 | 600 | 0.20 | |
| 4th qtr '04 | 194,170 | 2,000 | 1.47 | 190 | 0.14 | |
| 1st qtr '05 | 341,069 | 430 | 0.56 | 530 | 0.68 | Lab indicated no TPH(D) or TPH(G) present. Concentration is from light Oil in the C12-C36 range. |
| 2nd qtr '05 | 179,817 | 450 | 0.31 | 370 | 0.25 | |
| 3rd qtr '05 | 301,592 | 620 | 0.71 | 360 | 0.41 | |
| 4th qtr '05 | 187,467 | 75 | 0.05 | 84 | 0.06 | |
| 1st qtr '06 | 376,574 | 940 | 1.34 | 300 | 0.43 | |



Graph 1: Contaminant removal by quarter, Ground Water Extraction (GWE) system, Redwood Oil Bulk Plant, 455 Yolanda Ave., Santa Rosa, CA

APPENDIX C

CHAIN OF CUSTODY
AND
LABORATORY ANALYTICAL REPORTS

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

**Jim Green
ECM Group
290 W. Channel Rd.
Benicia, CA 94510**

**Lab Certificate Number: 47357
Issued: 01/24/2006**

**Project Number: 98-507-91
Project Name: 455 Yolanda Avenue
Project Location: Santa Rosa, CA**

Global ID: T0609700708

Certificate of Analysis - Final Report

On January 13, 2006, samples were received under chain of custody for analysis.

Entech analyzes samples "as received" unless otherwise noted. The following results are included:

| <u>Matrix</u> | <u>Test</u> | <u>Comments</u> |
|---------------|--|-----------------|
| Liquid | Electronic Deliverables EPA 8260B - GC/MS TPH as Gasoline by GC/MS TPH-Extractable w/SGCU | |

Entech Analytical Labs, Inc. is certified for environmental analyses by the State of California (#2346). If you have any questions regarding this report, please call us at 408-588-0200 ext. 225.

Sincerely,



Laurie Glantz-Murphy
Laboratory Director

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Jim Green

Samples Received: 01/13/2006

Project Number: 98-507-91
Project Name: 455 Yolanda Avenue
Project Location: Santa Rosa, CA
GlobalID: T0609700708

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 47357-001 Sample ID: MID Matrix: Liquid Sample Date: 1/11/2006 3:50 PM

| EPA 3510C EPA 8015 MOD.(Extractable with Silica Gel Cleanup) | | | | | | | | TPH-Extractable-SGCU | |
|--|--------|------|-------|-----------------|-------|-----------|------------|----------------------|------------|
| Parameter | Result | Qual | D/P-F | Detection Limit | Units | Prep Date | Prep Batch | Analysis Date | QC Batch |
| TPH as Diesel | 350 | | 1.0 | 50 | µg/L | 1/13/2006 | WD060113BS | 1/17/2006 | WD060113BS |
| Surrogate Surrogate Recovery Control Limits (%) | | | | | | | | | |
| o-Terphenyl | 63.8 | | | 16 - 137 | | | | Analyzed by: EricKum | |
| | | | | | | | | Reviewed by: dba | |

| EPA 5030C EPA 8260B for Groundwater and Water | | EPA 624 for Wastewater | | 8260Petroleum | | | | | |
|---|--------|---------------------------|-------|-----------------|-------|-----------|------------|-----------------------|-----------|
| Parameter | Result | Qual | D/P-F | Detection Limit | Units | Prep Date | Prep Batch | Analysis Date | QC Batch |
| Benzene | ND | | 1.0 | 0.50 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Toluene | ND | | 1.0 | 0.50 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Ethyl Benzene | ND | | 1.0 | 0.50 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Xylenes, Total | ND | | 1.0 | 0.50 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Methyl-t-butyl Ether | 37 | | 1.0 | 1.0 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| tert-Butyl Ethyl Ether | ND | | 1.0 | 5.0 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| tert-Butanol (TBA) | 32 | | 1.0 | 10 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Diisopropyl Ether | ND | | 1.0 | 5.0 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| tert-Amyl Methyl Ether | ND | | 1.0 | 5.0 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Surrogate Surrogate Recovery | | Control Limits (%) | | | | | | Analyzed by: TAF | |
| 4-Bromofluorobenzene | 102 | | | 60 - 130 | | | | Reviewed by: MaiChiTu | |
| Dibromofluoromethane | 93.9 | | | 60 - 130 | | | | | |
| Toluene-d8 | 103 | | | 60 - 130 | | | | | |

| EPA 5030C GC-MS | | | | | | | | TPH as Gasoline - GC-MS | |
|--|--------|------|-------|-----------------|-------|-----------|------------|-------------------------|-----------|
| Parameter | Result | Qual | D/P-F | Detection Limit | Units | Prep Date | Prep Batch | Analysis Date | QC Batch |
| TPH as Gasoline | 65 | | 1.0 | 50 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Surrogate Surrogate Recovery Control Limits (%) | | | | | | | | | |
| 4-Bromofluorobenzene | 94.0 | | | 60 - 130 | | | | Analyzed by: TAF | |
| Dibromofluoromethane | 95.7 | | | 60 - 130 | | | | Reviewed by: MaiChiTu | |
| Toluene-d8 | 96.3 | | | 60 - 130 | | | | | |

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

1/24/2006 9:39:19 PM - dba

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

ECM Group
290 W. Channel Rd.
Benicia, CA 94510
Attn: Jim Green

Samples Received: 01/13/2006

Project Number: 98-507-91
Project Name: 455 Yolanda Avenue
Project Location: Santa Rosa, CA
GlobalID: T0609700708

Certificate of Analysis - Data Report

Sample Collected by: Client

Lab #: 47357-002 Sample ID: INF Matrix: Liquid Sample Date: 1/11/2006 3:45 PM

| EPA 3510C EPA 8015 MOD.(Extractable with Silica Gel Cleanup) | | | | | | | | TPH-Extractable-SGCU | |
|--|--------|------|-------|-----------------|-------|-----------|------------|----------------------|------------|
| Parameter | Result | Qual | D/P-F | Detection Limit | Units | Prep Date | Prep Batch | Analysis Date | QC Batch |
| TPH as Diesel | 570 | | 1.0 | 50 | µg/L | 1/13/2006 | WD060113BS | 1/17/2006 | WD060113BS |
| Surrogate Surrogate Recovery Control Limits (%) | | | | | | | | | |
| o-Terphenyl | 80.9 | | | 16 - 137 | | | | Analyzed by: EricKum | |
| | | | | | | | | Reviewed by: dba | |

| EPA 5030C EPA 8260B for Groundwater and Water EPA 624 for Wastewater | | | | | | | | 8260Petroleum | |
|---|--------|------|-------|-----------------|-------|-----------|------------|-----------------------|-----------|
| Parameter | Result | Qual | D/P-F | Detection Limit | Units | Prep Date | Prep Batch | Analysis Date | QC Batch |
| Benzene | 17 | | 5.0 | 2.5 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Toluene | ND | | 5.0 | 2.5 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Ethyl Benzene | ND | | 5.0 | 2.5 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Xylenes, Total | 12 | | 5.0 | 2.5 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Methyl-t-butyl Ether | 300 | | 5.0 | 5.0 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| tert-Butyl Ethyl Ether | ND | | 5.0 | 25 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| tert-Butanol (TBA) | 380 | | 5.0 | 50 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Diisopropyl Ether | ND | | 5.0 | 25 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| tert-Amyl Methyl Ether | ND | | 5.0 | 25 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Surrogate Surrogate Recovery Control Limits (%) | | | | | | | | | |
| 4-Bromofluorobenzene | 101 | | | 60 - 130 | | | | Analyzed by: TAF | |
| Dibromofluoromethane | 96.3 | | | 60 - 130 | | | | Reviewed by: MaiChiTu | |
| Toluene-d8 | 101 | | | 60 - 130 | | | | | |

| EPA 5030C GC-MS | | | | | | | | TPH as Gasoline - GC-MS | |
|--|--------|------|-------|-----------------|-------|-----------|------------|-------------------------|-----------|
| Parameter | Result | Qual | D/P-F | Detection Limit | Units | Prep Date | Prep Batch | Analysis Date | QC Batch |
| TPH as Gasoline | 370 | | 5.0 | 250 | µg/L | N/A | N/A | 1/18/2006 | WM2060118 |
| Surrogate Surrogate Recovery Control Limits (%) | | | | | | | | | |
| 4-Bromofluorobenzene | 92.6 | | | 60 - 130 | | | | Analyzed by: TAF | |
| Dibromofluoromethane | 98.2 | | | 60 - 130 | | | | Reviewed by: MaiChiTu | |
| Toluene-d8 | 94.8 | | | 60 - 130 | | | | | |

Detection Limit = Detection Limit for Reporting.

D/P-F = Dilution and/or Prep Factor includes sample volume adjustments.

ND = Not Detected at or above the Detection Limit.

Qual = Data Qualifier

1/24/2006 9:39:21 PM - dba

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Method Blank - Liquid - EPA 8015 MOD.(Extractable with Silica Gel Cleanup) - TPH-Extractable-SGCU

QC/Prep Batch ID: WD060113BS

Validated by: dba - 01/17/06

QC/Prep Date: 1/13/2006

| Parameter | Result | DF | PQLR | Units |
|---------------|--------|----|------|-------|
| TPH as Diesel | ND | 1 | 50 | µg/L |

| Surrogate for Blank | % Recovery | Control Limits |
|---------------------|------------|----------------|
| o-Terphenyl | 69.0 | 16 - 137 |

Laboratory Control Sample / Duplicate - Liquid - EPA 8015 MOD.(Extractable with Silica Gel Cleanup) - TPH-Extractable-SGCU

QC/Prep Batch ID: WD060113BS

Reviewed by: dba - 01/17/06

QC/Prep Date: 1/13/2006

LCS

| Parameter | Method Blank | Spike Amt | SpikeResult | Units | % Recovery | Recovery Limits |
|------------------|--------------|-----------|-------------|-------|------------|-----------------|
| TPH as Diesel | <50 | 1000 | 655 | µg/L | 65.5 | 35 - 109 |
| TPH as Motor Oil | <200 | 1000 | 648 | µg/L | 64.8 | 30 - 132 |

| Surrogate | % Recovery | Control Limits |
|-------------|------------|----------------|
| o-Terphenyl | 77.4 | 16 - 137 |

LCSD

| Parameter | Method Blank | Spike Amt | SpikeResult | Units | % Recovery | RPD | RPD Limits | Recovery Limits |
|------------------|--------------|-----------|-------------|-------|------------|-----|------------|-----------------|
| TPH as Diesel | <50 | 1000 | 712 | µg/L | 71.2 | 8.3 | 25.0 | 35 - 109 |
| TPH as Motor Oil | <200 | 1000 | 775 | µg/L | 77.5 | 18 | 25.0 | 30 - 132 |

| Surrogate | % Recovery | Control Limits |
|-------------|------------|----------------|
| o-Terphenyl | 79.4 | 16 - 137 |

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200

Fax: (408) 588-0201

Method Blank - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/18/2006

| Parameter | Result | DF | PQLR | Units |
|------------------------|--------|----|------|-------|
| Benzene | ND | 1 | 0.50 | µg/L |
| Diisopropyl Ether | ND | 1 | 5.0 | µg/L |
| Ethyl Benzene | ND | 1 | 0.50 | µg/L |
| Methyl-t-butyl Ether | ND | 1 | 1.0 | µg/L |
| tert-Amyl Methyl Ether | ND | 1 | 5.0 | µg/L |
| tert-Butanol (TBA) | ND | 1 | 10 | µg/L |
| tert-Butyl Ethyl Ether | ND | 1 | 5.0 | µg/L |
| Toluene | ND | 1 | 0.50 | µg/L |
| Xylenes, Total | ND | 1 | 0.50 | µg/L |

Surrogate for Blank % Recovery Control Limits

| | | |
|----------------------|------|----------|
| 4-Bromofluorobenzene | 102 | 60 - 130 |
| Dibromofluoromethane | 92.3 | 60 - 130 |
| Toluene-d8 | 100 | 60 - 130 |

Method Blank - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060118

Validated by: MaiChiTu - 01/20/06

QC Batch Analysis Date: 1/18/2006

| Parameter | Result | DF | PQLR | Units |
|-----------------|--------|----|------|-------|
| TPH as Gasoline | ND | 1 | 50 | µg/L |

Surrogate for Blank % Recovery Control Limits

| | | |
|----------------------|------|----------|
| 4-Bromofluorobenzene | 93.7 | 60 - 130 |
| Dibromofluoromethane | 94.2 | 60 - 130 |
| Toluene-d8 | 94.0 | 60 - 130 |

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054

Phone: (408) 588-0200 Fax: (408) 588-0201

Laboratory Control Sample / Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

LCS

| Parameter | Method Blank | Spike Amt | SpikeResult | Units | % Recovery | Recovery Limits |
|----------------------|--------------|-----------|-------------|-------|------------|-----------------|
| 1,1-Dichloroethene | <0.50 | 20 | 16.1 | µg/L | 80.5 | 70 - 130 |
| Benzene | <0.50 | 20 | 18.1 | µg/L | 90.6 | 70 - 130 |
| Chlorobenzene | <0.50 | 20 | 19.7 | µg/L | 98.4 | 70 - 130 |
| Methyl-t-butyl Ether | <1.0 | 20 | 17.0 | µg/L | 85.0 | 70 - 130 |
| Toluene | <0.50 | 20 | 17.7 | µg/L | 88.6 | 70 - 130 |
| Trichloroethene | <0.50 | 20 | 20.6 | µg/L | 103 | 70 - 130 |

| Surrogate | % Recovery | Control Limits |
|----------------------|------------|----------------|
| 4-Bromofluorobenzene | 104.0 | 60 - 130 |
| Dibromofluoromethane | 93.3 | 60 - 130 |
| Toluene-d8 | 97.2 | 60 - 130 |

LCSD

| Parameter | Method Blank | Spike Amt | SpikeResult | Units | % Recovery | RPD | RPD Limits | Recovery Limits |
|----------------------|--------------|-----------|-------------|-------|------------|-----|------------|-----------------|
| 1,1-Dichloroethene | <0.50 | 20 | 16.6 | µg/L | 82.9 | 2.9 | 25.0 | 70 - 130 |
| Benzene | <0.50 | 20 | 18.5 | µg/L | 92.5 | 2.1 | 25.0 | 70 - 130 |
| Chlorobenzene | <0.50 | 20 | 20.1 | µg/L | 100 | 1.9 | 25.0 | 70 - 130 |
| Methyl-t-butyl Ether | <1.0 | 20 | 18.2 | µg/L | 90.9 | 6.7 | 25.0 | 70 - 130 |
| Toluene | <0.50 | 20 | 17.9 | µg/L | 89.7 | 1.3 | 25.0 | 70 - 130 |
| Trichloroethene | <0.50 | 20 | 21.8 | µg/L | 109 | 5.8 | 25.0 | 70 - 130 |

| Surrogate | % Recovery | Control Limits |
|----------------------|------------|----------------|
| 4-Bromofluorobenzene | 105.0 | 60 - 130 |
| Dibromofluoromethane | 93.1 | 60 - 130 |
| Toluene-d8 | 97.7 | 60 - 130 |

Laboratory Control Sample / Duplicate - Liquid - GC-MS - TPH as Gasoline - GC-MS

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

LCS

| Parameter | Method Blank | Spike Amt | SpikeResult | Units | % Recovery | Recovery Limits |
|-----------------|--------------|-----------|-------------|-------|------------|-----------------|
| TPH as Gasoline | <25 | 250 | 269 | µg/L | 108 | 65 - 135 |

| Surrogate | % Recovery | Control Limits |
|----------------------|------------|----------------|
| 4-Bromofluorobenzene | 95.4 | 60 - 130 |
| Dibromofluoromethane | 95.5 | 60 - 130 |
| Toluene-d8 | 93.7 | 60 - 130 |

LCSD

| Parameter | Method Blank | Spike Amt | SpikeResult | Units | % Recovery | RPD | RPD Limits | Recovery Limits |
|-----------------|--------------|-----------|-------------|-------|------------|-----|------------|-----------------|
| TPH as Gasoline | <25 | 250 | 265 | µg/L | 106 | 1.4 | 25.0 | 65 - 135 |

| Surrogate | % Recovery | Control Limits |
|----------------------|------------|----------------|
| 4-Bromofluorobenzene | 95.8 | 60 - 130 |
| Dibromofluoromethane | 94.7 | 60 - 130 |
| Toluene-d8 | 94.4 | 60 - 130 |

Entech Analytical Labs, Inc.

3334 Victor Court , Santa Clara, CA 95054 Phone: (408) 588-0200 Fax: (408) 588-0201

Matrix Spike / Matrix Spike Duplicate - Liquid - EPA 8260B - 8260Petroleum

QC Batch ID: WM2060118

Reviewed by: MaiChiTu - 01/20/06

QC Batch ID Analysis Date: 1/18/2006

MS Sample Spiked: 47377-005

| Parameter | Sample Result | Spike Amount | Spike Result | Units | Analysis Date | % Recovery | Recovery Limits |
|----------------------|---------------------------|--------------|--------------|-------|---------------|------------|-----------------|
| Benzene | 0.261 | 20 | 20.3 | µg/L | 1/18/2006 | 100 | 70 - 130 |
| Methyl-t-butyl Ether | ND | 20 | 22.4 | µg/L | 1/18/2006 | 112 | 70 - 130 |
| Toluene | ND | 20 | 19.4 | µg/L | 1/18/2006 | 97.0 | 70 - 130 |
| Surrogate | % Recovery Control Limits | | | | | | |
| 4-Bromofluorobenzene | 113.0 | 60 | - | 130 | | | |
| Dibromofluoromethane | 110.0 | 60 | - | 130 | | | |
| Toluene-d8 | 101.0 | 60 | - | 130 | | | |

MSD Sample Spiked: 47377-005

| Parameter | Sample Result | Spike Amount | Spike Result | Units | Analysis Date | % Recovery | RPD | RPD Limits | Recovery Limits |
|----------------------|---------------------------|--------------|--------------|-------|---------------|------------|------|------------|-----------------|
| Benzene | 0.261 | 20 | 19.8 | µg/L | 1/18/2006 | 97.7 | 2.6 | 25.0 | 70 - 130 |
| Methyl-t-butyl Ether | ND | 20 | 21.5 | µg/L | 1/18/2006 | 108 | 3.9 | 25.0 | 70 - 130 |
| Toluene | ND | 20 | 19.3 | µg/L | 1/18/2006 | 96.6 | 0.41 | 25.0 | 70 - 130 |
| Surrogate | % Recovery Control Limits | | | | | | | | |
| 4-Bromofluorobenzene | 111.0 | 60 | - | 130 | | | | | |
| Dibromofluoromethane | 111.0 | 60 | - | 130 | | | | | |
| Toluene-d8 | 103.0 | 60 | - | 130 | | | | | |

Entech Analytical Labs, Inc.

3334 Victor Court
Santa Clara, CA 95054
(408) 588-0200
(408) 588-0201 - Fax

Chain of Custody / Analysis Request

Attention to:

JIM SIREN

Phone No.:

707-751-0655

Purchase Order No.:

707-751-0653

Invoice to: (If Different)

Phone:

Company Name:

ECM GROUP

Fax No.:

707-751-0653

Project No.:

98-507-51

Company:

Redwood Oil Co.

Quote No.:

Mailing Address:

Box 802

Email Address:

City:

BENICIA

State:

CA

Zip Code:

94510

Project Location:

City:

State:

Zip:

Order ID: **47357**

Sample

Sampler:

Mike Jackson

Field Org. Code:

Turn Around Time

- Same Day 1 Day
 2 Day 3 Day
 4 Day 5 Day
 10 Day

No. of Containers

Matrix

1

2

3

4

5

6

7

8

9

10

11

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APPENDIX D
FIELD NOTES

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 11/10/06 Time 12:30 Technician M. JACKSON

GWE/SVE#1: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#2: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#3: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#4: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#5: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#6: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#7: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#8: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#9: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#10: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#1: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#2: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#3: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#4: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#5: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#6: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____

GWE Compressor: 60
Hour Meter _____ Pressure Setting 70 PSI Air Filter Condition Good
Operational Yes Belts Changed: No Oil Filter Changed: No Receiver Tank Drained _____

Totalizer Reading 168,602

Previous Totalizer Reading _____ Date&Time _____

GPM (This reading minus previous reading): _____

Comments: RE-START GWE SYSTEM, SET REG. 60 PSI
BALL VALVE OUT OF COMPRESSOR TANK 1/2 CHOSEN TO REG
AIR MORE. COMPRESSOR EXCHNG. TO MOVED.

BLEED OFF CARBONS

PRE-FILTER IN IN OUT

PROBLEM: TO MUCH WATER COMING IN TRANSFER PUMP CMW
REMOVE FAULT ENOMIT SYSTEM OFF 18:30
PUMP DOWN TANK.

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA,
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91 ON SITE 11:00

Date 11/13/06 Time 13:15 Technician M. JACKSON

GWE/SVE#1: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#2: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#3: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#4: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#5: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#6: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#7: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#8: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#9: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
GWE/SVE#10: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#1: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#2: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#3: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#4: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#5: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____
PMCS#6: Reg. Pressure _____ PSI Depth to Water: _____ Ft Operational _____

GWE Compressor:

Hour Meter _____ Pressure Setting 40 PSI Air Filter Condition Good
Operational Y Belts Changed: NO Oil Filter Changed: NO Receiver Tank Drained MTA

Totalizer Reading 1169,780

Previous Totalizer Reading _____ Date&Time _____

GPM(This reading minus previous reading): _____

Comments: SWITCH OUT TRANSFER PUMP WITH ONE FROM BENNETT VALLEY (FAIRGROUNDS)

PRE-FILTER PRESSURE 20 IN 20 OUT.

TOTALIZER MUST OF HAD SOMETHING IN IT OR NOT ENOUGH WATER FLOWING BECAUSE IT'S WORKING NOW.

DISCHARGING AT 15 GPM

OFF-SITE 18:00

98-508-91

YORANDA

M.J.

1/17/06

Pump

4 FT. DIA.

AT 50 PSI

H. TO 500' 5'6"

3'8" TO HIGH

2'5 TO LOW

2'5 FROM BOTTOM

DISCHARGES - 12 MPH

20 MIN

2:03 P.M.

TOTALIZER 1,200,0790

1,200,094.0

5

13 G.P.M.

13 G.P.M.

60
70
80

FIELD REPORT

Project Number 98-507-91 Project Name YOKAWADA (ESOW)

Date 1/17/06

Name M. JACKSON

Project Manager

Activity Description

SYSTEM ON, WATER SPARKING FROM HOSE
GO TO FIRST CARBON. TURN SYSTEM OFF.
RELIEF PRESSURE ON CARBONS. CUT HOSE BEFORE
SPLIT, PUT NEW CAMLOCK FITTINGS ON HOSE,
RE-ATTACH HOSE. RESTART SYSTEM. WATCH
FOR LEAKS; NONE SEEN). SYSTEM RUNNING
ON DEPART.

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 20 JAN '06 Time 12:10 Technician MATTHEW

| | | | | |
|-------------|---------------|-----|-----------------|----------------|
| GWE/SVE#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter Pressure Setting 55 PSI Air Filter Condition
Operational ✓ Belts Changed: N Oil Filter Changed: N Receiver Tank Drained N

Totalizer Reading 1221442.3

Previous Totalizer Reading Date & Time
GPM (This reading minus previous reading):

Comments: SYSTEM ↑ ON ARRIVAL. HOLDING TANK XFER PUMP
ENERGIZED ON ARRIVAL. PSI IN TO DEISTER: 19
OUT TO CARBON: 19

COMPRESSOR: ON: 1:20 140 psi AT valve 58 AT REC
OFF: 4:10 180 " 48 REC " 10

Compound full of trash. New H2O discharge permit posted
to DO & M binder.

System ↑ on DEPARTURE.

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 27 JAN '06 Time 1400 Technician M. HONEY

| | | | | |
|-------------|---------------|-----|-----------------|----------------|
| GWE/SVE#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6 | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter 1260101.7 Pressure Setting — PSI Air Filter Condition —
Operational — Belts Changed: — Oil Filter Changed: — Receiver Tank Drained —

Totalizer Reading 1260101.7

Previous Totalizer Reading — Date&Time —

GPM(This reading minus previous reading): —

Comments: SYSTEM 1 ON ARRIVAL

COMPRESSOR OFF: 3 MIN 10 SEC (180 PSI AT TANK - 47 PSI AT REG)

ON: 1 MIN 25 SEC (140 PSI AT TANK - 54 AT REG)

All Conditions Normal

System 1 on departure.

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA,
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 10 FEB. '06 Time 1300 Technician M. Anthony

| | | | |
|---------------------------|-----|-----------------|----------------|
| GWE/SVE#1: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter Pressure Setting PSI Air Filter Condition
Operational Belts Changed: Oil Filter Changed: Receiver Tank Drained

Totalizer Reading 1314449.6

Previous Totalizer Reading Date&Time

GPM(This reading minus previous reading):

Comments: SYSTEM 1 ON ARRIVAL

CHAMBER 472446 CAVS

COMPRESSOR: OFF: 45/144-45 SEC (180 psi TANK 50 REG)
ON: 2 MIN 20 SEC (140 psi TANK 60 REG)

AIR CONDITIONS NORMAL

TANK DRAIN WORKING

TRANSFER PUMP OUT: 20 psi IN TOTHER 10 psi OUT AT FILTER
Pump down 15 gpm out to CARBON 15

INF & EEF CARBONS @ 8 psi

SYSTEM 1 ON DEPARTURE

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA,
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 17 Feb '06 Time 1245 Technician M. Haney

| | | | | |
|-------------|---------------|-----|-----------------|----------------|
| GWE/SVE#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6 | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter 114 Pressure Setting ✓ PSI Air Filter Condition ok
Operational y Belts Changed: N Oil Filter Changed: no Receiver Tank Drained y

Totalizer Reading 1354113.8

condition ok

Previous Totalizer Reading _____ Date&Time _____

GPM (This reading minus previous reading): _____

Comments: System 1 on ARRIVAL. Holding Tank TRANSFER Pump
on: 19PSI IN // 17 OUTS DURING 015 GPM

COMPRESSOR: on: 1/1 50^{out} (135PSI TANK // 60PSI REG)
OFF: 5 MIN: 10 SEC < 180 PSI TANK // 50PSI REG

All conditions normal.

10 psi INF CARBON // 8 psi AT EFF CARBON WATER XFER
PUMP ON.

System 1 on departure.

REDWOOD CITY CO.
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 24 Feb 06 Time 13200 Technician M. Maxley

GWE/SVE#1: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#2: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#3: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#4: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#5: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#6 Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#7: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#8: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#9: Reg. Pressure PSI Depth to Water: Ft Operational
GWE/SVE#10: Reg. Pressure PSI Depth to Water: Ft Operational
PMCS#1: Reg. Pressure PSI Depth to Water: Ft Operational
PMCS#2: Reg. Pressure PSI Depth to Water: Ft Operational
PMCS#3: Reg. Pressure PSI Depth to Water: Ft Operational
PMCS#4: Reg. Pressure PSI Depth to Water: Ft Operational
PMCS#5: Reg. Pressure PSI Depth to Water: Ft Operational
PMCS#6: Reg. Pressure PSI Depth to Water: Ft Operational

GWE Compressor:

Hour Meter 1/4 Pressure Setting ok PSI Air Filter Condition ok
Operational y Belts Changed: n Oil Filter Changed: n Receiver Tank Drained y

Totalizer Reading 386468.9

Previous Totalizer Reading _____ Date&Time _____

GPM(This reading minus previous reading): _____

Comments: SYSTEM 1 ON ARRIVED. AIR CONDITIONS NEEDED

- COMPRESSOR TURNED ON 1:55 AM (140 FT TANK 60 FT RET)
TURN OFF: 4:55 AM (185 FT TANK 30 FT RET)

Auto Drain operational

SYSTEM 1 ON, DEPARTURE.

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 3 MAR '06 Time 11300 Technician MATHESY

| | | | |
|---------------------------|-----|-----------------|----------------|
| GWE/SVE#1: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter Pressure Setting PSI Air Filter Condition
Operational Belts Changed: Oil Filter Changed: Receiver Tank Drained

Totalizer Reading 6409408.1

Previous Totalizer Reading Date&Time

GPM(This reading minus previous reading):

Comments: SYSTEM ON ARRIVAL - SYSTEM SHUT OFF
AT 1600 ON 3 MAR 06 DUE TO SUSPECTED CARBON
FOULING ISSUE.
OPENED AND GOT

SYSTEM ON ARRIVAL.

REDWOOD OIL CO.
465 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 20 MARCH Time 1300 Technician M. Hone

| | | | | |
|-------------|---------------|-----|----------------|----------------|
| GWE/SVE#1: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#2: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#3: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#4: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#5: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#6: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#7: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#8: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#9: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| GWE/SVE#10: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| PMCS#1: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| PMCS#2: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| PMCS#3: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| PMCS#4: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| PMCS#5: | Reg. Pressure | PSI | Depth to Water | Ft Operational |
| PMCS#6: | Reg. Pressure | PSI | Depth to Water | Ft Operational |

GWE Compressor:

Hour Meter Pressure Setting PSI Air Filter Condition
Operational Belts Changed: Oil Filter Changed: Receiver Tank Drained

Totalizer Reading 1448654.6

Previous Totalizer Reading Date & Time

GPM (This reading minus previous reading):

Comments: SYSTEM 1 ON ARRIVAL (SYSTEM BACK ONLINE ON 16 MARCH @ 1600) (2000 GPM)
COMPRESSOR ON: 2 MIN 6 SEC (40 psi AT TANK / 60 FT REG)
OFF: 3 MIN 45 SEC (175 psi AT TANK / 52 FT REG)

X-FEED Pump Energized: 18 psi in / 8' out during
20 gpm

SYSTEM 1 ON DEPARTURE.

JH

REDWOOD OIL CO.
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 24 Mar '06 Time 1330 Technician MADONEN

| | | | |
|---------------------------|-----|-----------------|----------------|
| GWE/SVE#1: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter N/A Pressure Setting / PSI Air Filter Condition O.K.
Operational Y Belts Changed: N Oil Filter Changed: N/A Receiver Tank Drained Y

Totalizer Reading 1474123.9

Previous Totalizer Reading Date & Time

GPM (this reading minus previous reading):

Comments: System 1 on arrival
Compressor on 1 min 57 sec (140 at tank / 60 at reg)
off 4 min 5 sec (180 at tank / 52 at reg)

XFER PUMP ON AT ARRIVAL doing 29 GPM
14 PSI in / 10 psi out

All conditions normal. Compressor in good shape

System 1 on departure

FIELD REPORT

Project Number 98-507-91 Project Name YOHANDA (ESOW)

Date 3/30/06

Name M. JACKSON / J. HARMON

Project Manager _____

Activity Description

PMC-2: PUMPING, DISCHARGING EVERY 20 SEC.

PMC-6: PUMPING (WATER IN AIRLINE) BEEN OFF

DISCHARGING EVERY 20 SEC.

PMC-3: PULLED PUMP, SLIDE FLOAT STICKING
CLEANED FLOAT & ROD, PUT PUMP BACK TOGETHER
RE-INSTALLED. PUMPING, DISCHARGING EVERY 20 SEC.

PMC WELL RIGHT ONLY GETTING 60 PSI THIS IS NOT
ENOUGH TO PUSH THE WATER BACK TO PAD.

TURN PRESSURE IN PAD UP TO 80 PSI.

Re-Set Auto Drain on Compressor To Every 10min,
FOR 6 SEC.

New Reg Need To Be INSTALLED So PMC Wells
CAN RUN AT HIGHER PRESSURE THAN ONE WELL
TO PUSH More WATER To PAD.

REDWOOD OIL COMPANY
455 YOLANDA AVE., SANTA ROSA
Ground Water Treatment System
Operations and Maintenance Log

ECM PROJECT #98-507-91

Date 31 MAR '06 Time 1500 Technician M. Allen

| | | | | |
|-------------|---------------|-----|-----------------|----------------|
| GWE/SVE#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#6: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#7: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#8: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#9: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| GWE/SVE#10: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#1: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#2: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#3: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#4: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#5: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |
| PMCS#6: | Reg. Pressure | PSI | Depth to Water: | Ft Operational |

GWE Compressor:

Hour Meter N/A Pressure Setting N/A PSI Air Filter Condition ok
Operational up Belts Changed: N Oil Filter Changed: N Receiver Tank Drained y

Totalizer Reading 1517165.5

Previous Totalizer Reading _____ Date & Time _____

GPM (This reading minus previous reading): _____

Comments: SYSTEM 9 ON ARRIVED
XFER PUMP OPERATED DURING 40 GPM CHANGED OUT
BAG FILTER CHANGED
SUMP SCREEN DOOR DT CLEARED AND RUNNING WELL

Comp On: 2 MIN 15 SEC
Off: 3 MIN 20 SEC

{ 135 FT TANK FLOW AT Reg
185 FT TANK FLOW AT Reg

XFER Pump On: 27 min Act Bdg change.
PSI In: 12 PSI Out: 12